

ACT Water Strategy 2025-45

ACT Government

Acknowledgement of Country

Dhawura nguna ngurumbangu gunanggu Ngunnawal.
Nginggada dindi dhawura Ngunnawalbun yindjumaralidjinyin.
Mura bidji mulanggaridjindjula.
Naraganawaliyiri yarabindjula.

This country is Ngunnawal ancestral and spiritual homeland.
We all always respect elders, male and female, as well as Ngunnawal country itself.
They always keep the pathways of their ancestors alive.
They walk together as one.

The ACT Government acknowledge the Ngunnawal people as traditional custodians of the ACT and recognise any other people or families with connection to the lands of the ACT and region. We acknowledge and respect their continuing culture and the contribution they make to the life of this city and this region.

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GPO Box 158, Canberra City 2601
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The ACT Water Strategy at a glance

Vision

Working together, managing water wisely to support a vibrant, sustainable and thriving region

By 2045 and beyond:

Outcome 1: Healthy catchments and waterbodies

Well managed, climate resilient and functioning catchments and waterbodies that support the liveability and environmental values of the ACT

Outcome 1 aspiration statements

1.a *Water sensitive urban landscapes*: Urban landscapes are water sensitive, where urban development, stormwater and wastewater are managed to:

- Balance ecosystem health, community amenity, infrastructure efficiency, and place-based cultural values
- Support urban greening, cooling, recreation, public health and amenity
- Protect the health of waterbodies, and
- Support flood risk management.

1.b *Healthy waterbodies*: Waterways, lakes, riparian zones and catchments support healthy flora and fauna populations; provide wildlife habitat and corridors; support drinking water supply and public health; support recreational and cultural values; and are resilient to climate change and flood impacts. The condition of healthy waterbodies reflects the values of Traditional Custodians and other environmentally connected people, recognising that water health is inseparable from the health of Country and all living relationships.

1.c *Water for the environment*: We continue to support sustainable water use while meeting the current and future critical environmental water needs of surface and groundwater dependent ecosystems. These needs are informed by both scientific understanding and Traditional ecological knowledge of Country's water requirements.

1.d *Integrated land and water management*: Urban development, rural land, and catchments are managed at a regional scale using an integrated, multidisciplinary approach that reflects both contemporary thinking and Traditional Knowledge of Country's interconnectedness.

By 2045 and beyond:

Outcome 2: Sustainable water resources used efficiently

The ACT has an integrated, sustainable and climate resilient water system that meets the diverse water needs across the ACT

Outcome 2 aspiration statements

2.a *Water for future generations*: We have a secure, climate-resilient water supply that meets the current and future water needs of the ACT. The ACT has water to support:

- Reliable, accessible drinking water that is used efficiently
- Ecological health of waterbodies and catchments
- Cultural and recreational values
- Efficient non-potable water use, and
- Sustainable population growth and development.

This aspiration is shaped by contemporary scientific knowledge and the enduring cultural responsibilities of Traditional Custodians, who have cared for Country for tens of thousands of years.

2.b *Diverse water sources*: Water needs are met by optimising the use of all available water sources, and through water conservation and efficiency. Diversification strategies draw on both technological innovation and Traditional perspectives.

2.c *Regional approach*: Regional water security is supported through collaborative efforts from the ACT, NSW and Commonwealth Governments and communities within the ACT and region catchment area. Regional collaboration requires recognising different governance systems and knowledge frameworks, including Traditional Custodian water management practices.

By 2030 and beyond:



Outcome 3: A community that values water and enjoys clean, healthy catchments

An engaged ACT community that values water and proactively cares for catchments, water resources and waterbodies to support actions that deliver safe, clean water for drinking, recreation, the environment and to support cultural values

Outcome 3 aspiration statements

3.a *Community water knowledge*: An understanding of the local and regional water context is an ongoing part of living in the ACT and underpins the community valuing water and engaging on water related issues. Water knowledge encompasses both technical expertise and cultural relationships with water, acknowledging the diverse ways in which communities understand and value and interact with our water systems.

3.b *Dynamic information sharing*: There is an ongoing, interactive knowledge exchange within and between the water sector and the community, allowing the community to easily find information and contribute ideas, observations, insights and perspectives on water matters. Information sharing recognises Traditional Knowledge, scientific knowledge, community observations, and professional expertise as complementary and equally valuable ways of understanding water.

3.c *Community valuing water*: The community understands the value of water to the ACT and region catchment area, and the challenges associated with managing water resources and protecting our catchments. Water values encompass Traditional Custodians spiritual and cultural connections, community social and recreational values, environmental values, and economic values as interconnected rather than competing.

3.d *Community input into decision-making*: Community values and input informs decision making in water and catchment management, planning and investment. Decision-making processes acknowledge the diverse perspectives within the community and create space for all voices to be heard.

3.e *Community benefit and partnerships*: Opportunities for projects and programs to enhance community benefit are identified and embedded in design and delivery. This includes opportunities to deliver projects or programs in partnership between the community and the water sector , drawing on diverse knowledge systems and value frameworks to foster mutual benefit and shared learning.

By 2045 and beyond:



Outcome 4: Caring for water with Traditional Custodians

Traditional Custodians are partners in water planning, policy and management, and have access to water guided by self-determined priorities

Outcome 4 aspiration statements

4.a *Water policy, planning and management*: Traditional Knowledge, rights, interests and aspirations of Traditional Custodians are incorporated in water policy, planning and management in the ACT, recognising this as not merely supplementary information, but as a holistic framework for managing Country.

4.b *Partnerships*: Traditional Custodians and the ACT Government work in partnership to support healthy catchments and waterbodies.

4.c *Traditional values and uses*: Cultural values and uses are integrated into water planning and management through knowledge sharing and capacity building. Traditional values represent complete relationships with Country that encompass environmental, social, economic, and spiritual dimensions simultaneously. These can support how others also value Country.

4.d *Self-determination and economic participation*: Traditional Custodians own, manage and access water that empowers economic self-determination through:

- Access to water entitlements and licences consistent with the National Agreement on Closing the Gap
- Effective governance arrangements, education and knowledge sharing on water resource management
- Increased employment of First Nations people in the ACT water sector, and
- Ensuring Traditional Custodians have pathways for self-determination and economic participation enhances their leadership in managing water resources.

Introduction

Water is essential to the liveability of the ACT and region catchment area. It sustains our community through high-quality drinking water and water for our homes, gardens and businesses. Waterbodies across the ACT support important environmental values and ecosystem services, while also providing opportunities for recreational and cultural activities.

The ACT's catchments and waterbodies hold deep cultural, spiritual, and ecological significance for Ngunnawal Traditional Custodians, as well as other First Nations peoples and families with enduring connections to the lands and waters of the ACT and surrounding region.

We face a range of challenges in managing water use and waterbodies. Climate change, population growth and urbanisation are placing increased pressures on our waterbodies and water resources and will require changes in how we manage water. Ageing water infrastructure, across both ACT Government and Icon Water assets, further compounds these pressures. Collectively, these trends are expected to reduce the reliability of our water resources, increase the demand for water and, without mitigation, increase the degradation of waterways and lakes. However, through appropriate and coordinated water management and investment, we can collectively respond to these challenges and achieve better water outcomes for the Territory.

The *ACT Water Strategy 2025-2045* (the Strategy) outlines the long-term direction for water management in the ACT to 2045. It sets a shared vision and provides high-level guidance across four outcome areas, each supported by aspiration statements.

The four outcome areas are not listed in order of priority—each is equally important and together they will help deliver the Strategy's shared vision.

Vision: Working together, managing water wisely to support a vibrant, sustainable and thriving region.

- Outcome 1: Healthy catchments and waterbodies
- Outcome 2: Sustainable water resources used efficiently
- Outcome 3: A community that values and enjoys clean, healthy catchments
- Outcome 4: Caring for water with Traditional Custodians

Implementing the Strategy

Implementation plans will outline specific actions, responsibilities, and delivery timeframes. These plans will be updated every five years by the ACT Government in collaboration with the water sector. They will support an adaptive management approach and include mechanisms for monitoring, evaluation, and reporting. Each plan will also identify key enablers essential to successful delivery of the Strategy, such as clear governance arrangements and a well-coordinated, collaborative water sector.

Progress against the actions in the current implementation plan will be tracked through annual report cards published by the ACT Government. In addition, an evaluation report will be produced every five years to inform the development of the next implementation plan. These reports will assess the impact of the previous implementation plan on each outcome, with a focus on the evaluation themes outlined in this Strategy, as well as any other matters identified by Government. They will also highlight progress and achievements against the actions identified in the previous plan.

This Strategy provides a framework for collective action to achieve improved water outcomes for the Territory, guided by its vision. Success in achieving the Strategy's outcomes and aspirations will be driven by a collaborative and coordinated effort across the water sector.

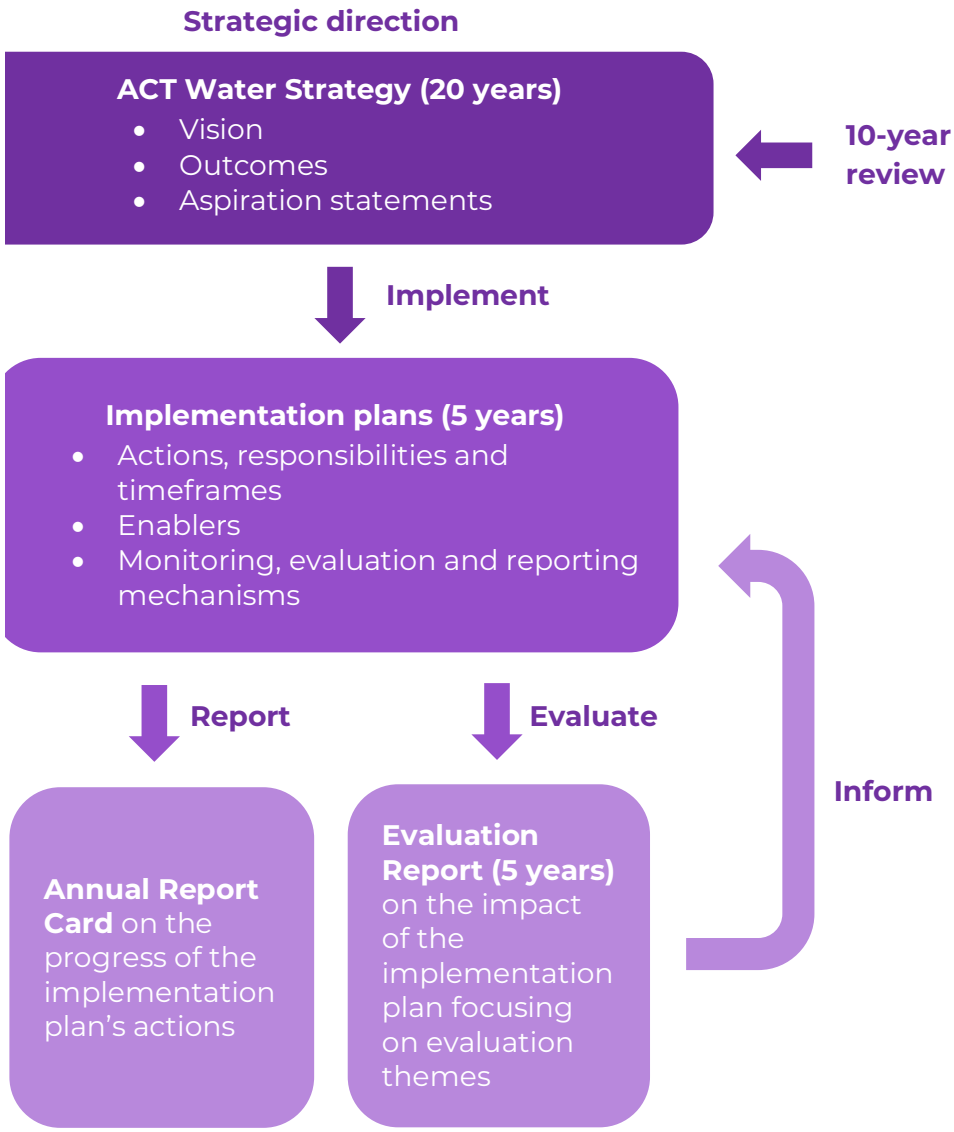


Figure 1: Framework of the refreshed ACT Water Strategy

Previous ACT Water Strategy 2014 to 2024

The ACT Water Strategy 2014-44: Striking the Balance (the 2014 ACT Water Strategy) provided strategic guidance on a wide range of water management activities in the Territory. These included catchment management, stormwater and flood management, water supply and services, water for the environment, recreation, cultural water use, and public health. Since 2014, several initiatives have contributed to improved water security and management outcomes in the ACT, including:

- Identified water related climate vulnerabilities to inform decision making and strengthen resilience
- Adding new water sources, such as stormwater harvesting and reuse as part of the Inner North Reticulation Network
- Strategic investment in catchment health and water quality across the ACT
- Evaluating the effectiveness of Water Sensitive Urban Design (WSUD) and permanent water conservation measures
- Supporting community stewardship in caring for waterbodies through programs such as Waterwatch and the Leaf Collective
- Increasing Traditional Custodian engagement and participation through the development of the ACT Water Resource Plan and by conducting Aboriginal Waterway Assessments
- Supporting regional coordination on water matters through the ACT and Region Catchment Management Coordination Group
- Delivering 28 wetlands and other water quality assets under the ACT Healthy Waterways program.

As part of the 2014 ACT Water Strategy's 10-year review, several opportunities for improvement were identified, including:

- Strengthening monitoring, evaluation, reporting and accountability mechanisms
- Simplifying the strategy's framework
- Building the capacity and capability of the water sector to implement the Strategy.

The *ACT Water Strategy 2025-45* builds on the progress made to date and reflects improvements identified in the review process. It also responds to emerging challenges such as climate change, a growing population and urbanisation, which are placing increased pressures on our waterbodies and water resources.

Water in the ACT in 2025

A regional overview

The ACT is situated entirely within the upper Murrumbidgee River Catchment and the Murray-Darling Basin. The Territory features a diverse landscape with densely populated urban areas, nature reserves, national parks and waterbodies including a protected water supply catchment. There are also areas of agricultural land, supporting activities such as sheep farming, viticulture, and small areas of cropping.

The main watercourses of the ACT are the Murrumbidgee, Molonglo and Cotter rivers. The Murrumbidgee and Molonglo rivers originate in NSW and flow into the ACT where they converge and continue through the Territory. The Cotter River originates within the ACT and flows into the Murrumbidgee River. All surface water that passes through the ACT flows into the Murrumbidgee River before flowing into NSW and downstream to the connected southern Murray-Darling Basin. Within the ACT there are also several natural freshwater wetlands, which are typically located near major rivers and creeks.

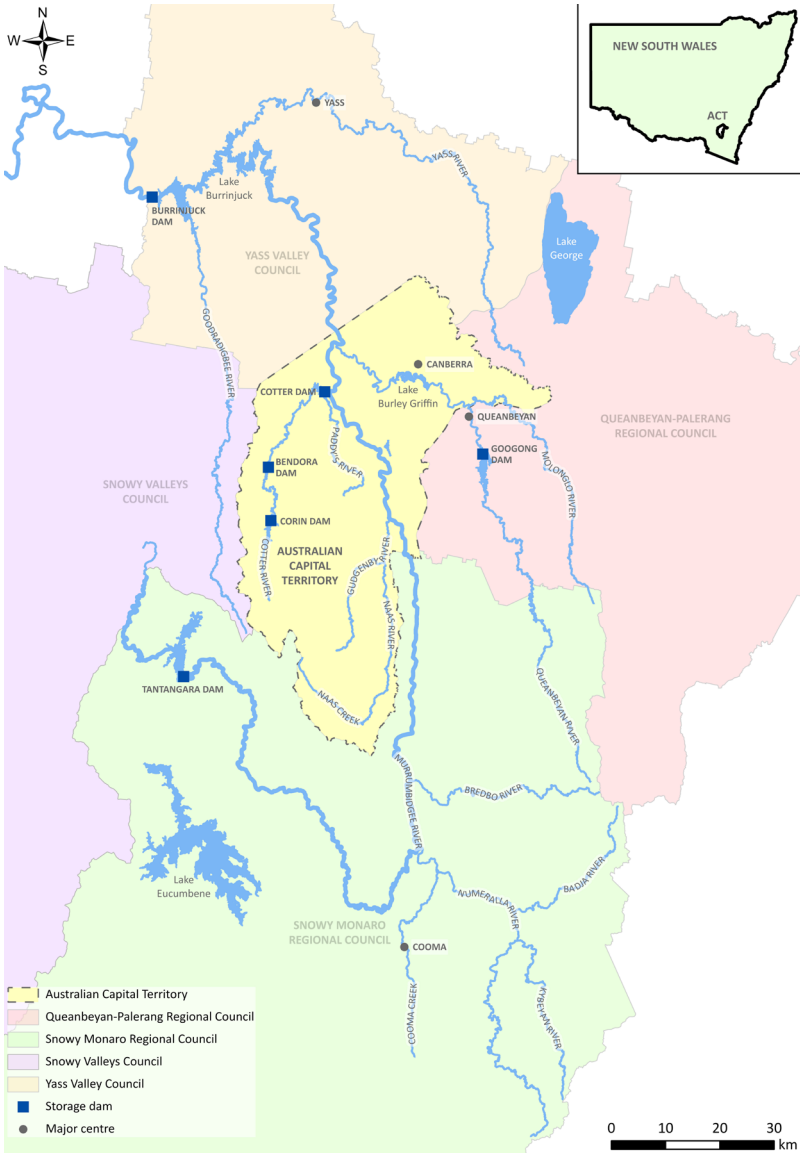


Figure 2: Map of ACT and surrounding region

Groundwater resources in the ACT are relatively limited compared to other regions in Australia. Local aquifers fall into two categories: fractured rock aquifers and alluvial aquifers. Both are relatively shallow and nearly all water that infiltrates to the groundwater system eventually discharges into surface streams.

In the ACT, water is managed through designated Water Management Areas (WMAs) established under the *Water Resources (Water Management Areas) Determination 2019*, a disallowable instrument under the *ACT Water Resources Act 2007.* These areas are based on watersheds and may extend into New South Wales where natural boundaries do not align with the ACT border.

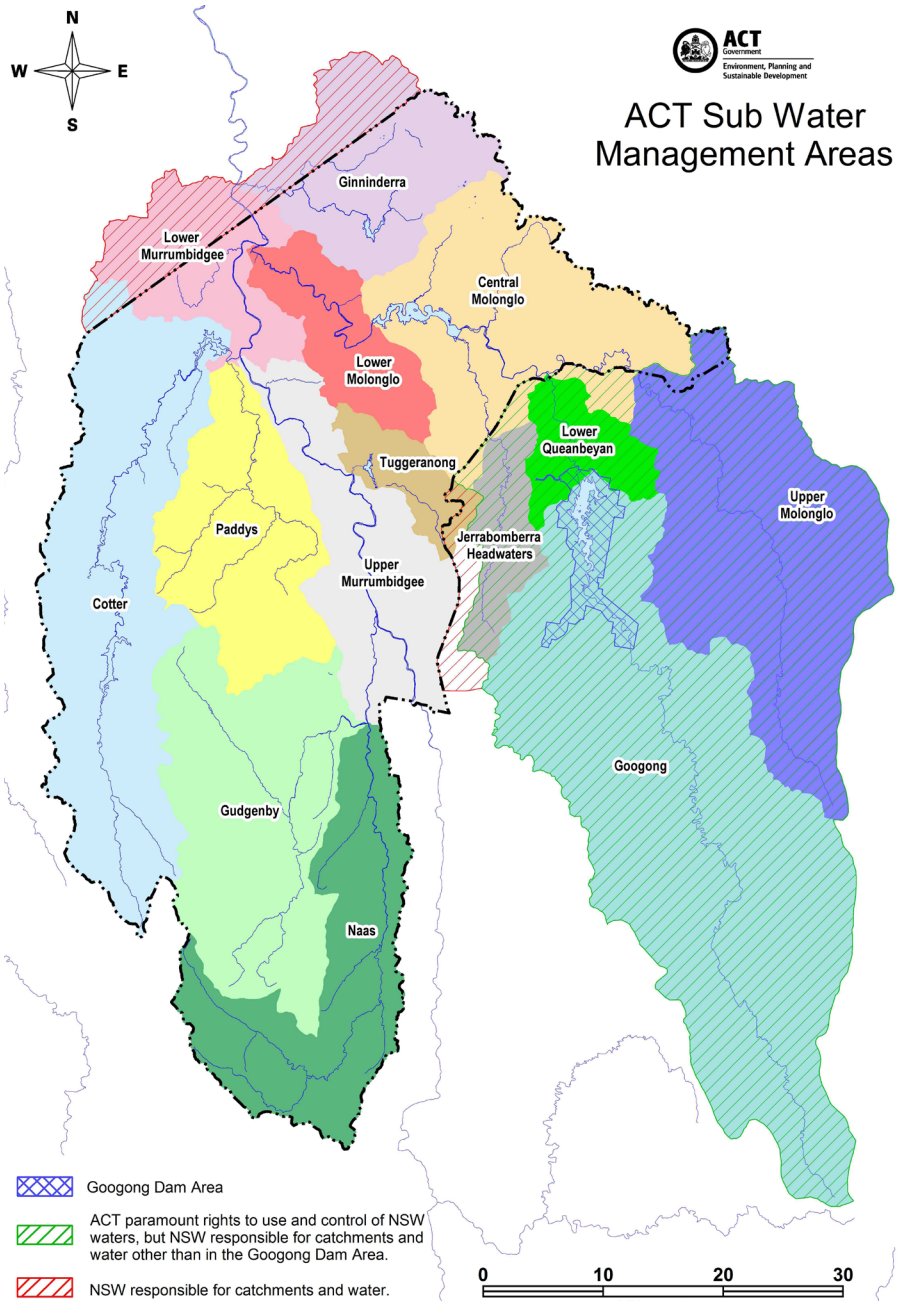


Figure 3: ACT water management areas as identified in the *Water Resources (Water Management Areas) Determination 2019* (DI2019-38), made under the *Water Resources Act 2007* (ACT)

Water management legislative and policy instruments

Water management in the ACT is guided by a framework of legislation, policy and agreements across Commonwealth, regional and Territory government levels. Key legislative and policy instruments across these levels are summarised in Table 1. Further detail on relevant policy, legislative and institutional arrangements are provided in *Appendix A – Policy, legislative and institutional context for water management in the ACT in 2025*.

Table 1: Key legislative and policy settings that guide water management in the ACT

International, national and regional legislation, policy and plans	***Seat of Government Acceptance Act 1909*** (Cth) Defines the water resource (paramount right) as the basis for establishing and developing the nation's capital. **National Water Initiative 2004 (NWI)[1]** A blueprint for national water reform and best practice for water management. ***Water Act 2007*** (Cth) Legislative framework for sustainable management and efficient use of water resources across Australia. **United Nations Declaration on the Rights of Indigenous People (2007)** An international instrument that sets out the individual and collective right of Indigenous peoples globally. It establishes a universal framework of minimum standards for their survival, dignity and wellbeing, including the right to maintain and strengthen their spiritual and cultural relationships with traditionally owned or used lands, water and natural resources, and participate meaningfully in management. **National Urban Water Planning Principles (2008)** Adopted by the Council of Australian Governments (COAG) to guide governments and utilities in planning urban water services sustainably and efficiently, helping balance supply and demand while building public trust in varied water sources. **National Agreement on Closing the Gap (2008)** An Australian Government strategy aimed at reducing the inequalities between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians. **Murray-Darling Basin Plan 2012 (Basin Plan)** Legislative framework for coordinated and sustainable water management across Basin states and the Murray-Darling Basin Authority. The ACT must comply with the Basin Plan's sustainable diversion limits, which cap average water use to protect river health and the environment.
ACT legislation, statutory bodies and codes	***Environment Protection Act 1997*** Legislative framework to protect and maintain the quality of the ACT's environment by reducing and eliminating the discharge of pollutants into air, land and water. ***Water Resources Act 2007*** Governing legislation for managing water resources in the ACT. **ACT Water Resource Plan 2020** Required under the *Water Act 2007* (Cth) to manage and share water sustainably and in accordance with the Basin Plan. **ACT and Region Catchment Management Coordination Group** Statutory advisory body established under the *Water Resources Act 2007* (ACT) to facilitate improved governance and coordination of water activities across the ACT and region catchment area. **Water Use and Catchment General Code** An instrument under the *Water Resources Act 2007* (ACT) that identifies waters of the ACT in terms of the permitted water uses and environmental values and identifies the water quality and streamflow criteria related to the full protection of these uses and values. This Code links to the water quality standards specified in the *Environment Protection Regulation 2005*.

1: The Australian Government is reviewing the NWI, with a new National Water Agreement being developed to address emerging challenges. Endorsement of the Agreement remains a decision for individual jurisdictions.

There are a range of other strategies, policies, plans, programs and groups that complement this Strategy, most of which are listed in *Appendix B – Strategies, policies, plans, programs and groups in 2025 that complement this Strategy.*

Water use and values in the ACT

Water is vital in sustaining the ACT's largely urban population and regional liveability. It supports environmental, social, cultural, recreational, public health, amenity and aesthetic values, while also enabling economic growth through agriculture and industry.

Water uses and sources

Canberra's potable water sources and use

Between 2014 and 2020, the ACT's average annual net take of licensed water was 19.9 gigalitres (GL). Around, 85% of this water was used to supply potable water to Canberra and Queanbeyan, with residential customers being the primary users in Canberra, alongside commercial and industrial sectors.

Icon Water is responsible for planning and delivering potable water services in the ACT. It owns and operates the Territory's potable water supply network, which includes a network of dams, water treatment plants, reservoirs, pumping stations, mains and associated infrastructure. Potable water is almost entirely sourced from surface water and stored in water supply reservoirs that are owned and operated by Icon Water.

The ACT's major water supply reservoirs are the Cotter, Bendora and Corin dams - located within the Cotter River Catchment - and Googong Dam, situated in the Queanbeyan River Catchment in NSW. The Cotter River Catchment is protected upstream of Cotter Dam, with no residential or agricultural development and restrictions on recreational activities. The Cotter River is the Territory's primary source of water, followed by the Queanbeyan and Murrumbidgee Rivers. The Queanbeyan River Catchment is a rural catchment that includes farmland, forestry and small communities. The Googong Dam foreshores are managed by the ACT Government to protect water quality, as well as social and heritage values.

Non-potable water sources and use

Licensed water taken outside the Territory's potable water supply network is sourced from waterways, lakes, groundwater, recycled water and stormwater. This water is used for the irrigation of public green spaces (such as parks and sports fields) and golf courses, agricultural and horticultural activities, livestock watering, and various commercial and industrial uses.

Stormwater is used for irrigation of public green spaces

Hard surfaces - such as roofs, roads, carparks and pavements - increase the amount of stormwater runoff in urban areas. Lake Burley Griffin, Lake Tuggeranong and Lake Ginninderra, as well as 198 constructed wetlands and ponds, are used to manage the impacts of this stormwater runoff on downstream waterbodies. Some of these lakes and ponds serve as sources of stormwater for irrigating public green spaces. The ACT's planning system encourages increasing permeability in urban developments to enhance water retention in the landscape.

Some recycled water is used for irrigation, but most treated wastewater is returned to waterways

Icon Water owns and operates the Lower Molonglo Water Quality Control Centre (LMWQCC), the ACT's main wastewater treatment plant and the largest inland treatment plant in Australia. A portion of recycled wastewater is used for LMWQCC operations and irrigation, but most wastewater is treated and returned to the Molonglo River at its confluence with the Murrumbidgee River.

Water values

Catchments and waterbodies in the ACT hold a range of values including environmental, social, cultural, recreational, amenity, aesthetic and economic values.

Water is central to cultural and spiritual connection to Country

Traditional Custodians are the first scientists, managers and carers of Country. Country encompasses all landforms, air, plants, animals, foods, medicines, minerals, stories, special places, and water.

The catchments and waterbodies of the ACT hold deep cultural, spiritual and ecological significance for Traditional Custodians and other First Nations peoples and families with enduring connections to these lands and waters. The Murrumbidgee - known as Marambidji, 'the pathway to the ancestors' in Ngunnawal language – is central to Ngunnawal cultural identity, spiritual practice and the cultural economy, supporting trade and relationships with neighbouring Nation groups.

Ngunnawal kinship systems and songlines are understood to follow the waterways of the ACT including the Murrumbidgee, Molonglo and Cotter rivers. These rivers and their tributaries represent Dreaming stories, cultural roots, and a sense of belonging, identity, and purpose. Under lore and customs, there is reciprocal responsibility to care for Water, just as Water cares for people. These obligations have been upheld for tens of thousands of years and continue to connect communities and language groups through surface and groundwater systems.

Water supports community recreation, health and wellbeing

Access to safe, clean water for recreation is vital to the health and wellbeing of the ACT community. Some of the Territory's waterbodies support water-based recreation, such as swimming, fishing, boating, and water skiing, as well as land-based recreation like walking and cycling alongside waterways.

Managing water wisely supports healthy vegetation in public green spaces, enhancing community enjoyment while contributing to cooler temperatures and improved air quality. Maintaining water quality appropriate for recreational activities ensures that these spaces can be enjoyed safely and risk to public health.

The ACT community plays an active role in monitoring, managing and advocating for the health of local catchments. Community contributions have been especially valuable during periods of drought, supporting water conservation efforts across the Territory. Several community catchment groups are dedicated to caring for the Territory's waterbodies. Their work includes monitoring the health of waterways, undertaking restoration efforts such as removing weeds and litter and planting native vegetation to improve habitat and water quality.



Figure 4: Children at Lyneham Wetland

The value that community put on improved environmental amenity is more than twice the economic value of water quality management, reflecting the significant importance that urban lakes play in enhancing the quality of life and wellbeing of ACT residents.[1] The total non-market value of the three largest urban lakes (Lake Burley Griffin, Lake Tuggeranong and Lake Ginninderra) is estimated at approximately $216 million annually, incorporating both community values and water quality management.

Important environmental values depend on water

The ACT's waterbodies, and their riparian land and floodplains, provide important environmental values for the region. Aquatic environments deliver ecosystem services such as water purification and nutrient cycling. Natural habitats include bogs, swampy meadows, chain of ponds, creeks and rivers. Since European settlement, reservoirs, farm dams, urban lakes, ponds and constructed wetlands have been added to the landscape.

Constructed and modified waterbodies in Canberra's urban areas help manage water quality and provide some habitat to support biodiversity. Together these water bodies host numerous aquatic or water-dependent native animals, including fish, mammals, birds, reptiles, frogs and numerous invertebrates.

The waterbodies within the ACT and region catchment area play a vital role in the long-term health of high value ecosystems. These include the internationally important Ginini Flats Wetland Complex Ramsar site in the Namadgi National Park, as well as 12 wetlands classified as nationally important under the Directory of Important Wetlands in Australia, such as the Jerrabomberra Wetlands. In addition to their ecological significance, rivers and creeks across the region serve as key biodiversity corridors, enhancing landscape connectivity and forming an integral part of the ACT's Blue-Green Network.



Figure 5: Cotter River above Vanitys Crossing

The condition of catchments and waterbodies

Waterbodies across the ACT vary in condition and are subject to diverse, and at times competing, community values and water resource management priorities.

Urban catchments and waterbodies

The 2022 State of the Lakes and Waterways in the ACT report by the Office of the Commissioner for Sustainability and the Environment[2] found the condition of urban lakes and waterways are impacted by stormwater runoff, sewage treatment discharges and recreational activities. The aquatic health of waterways such as Tuggeranong Creek, Ginninderra Creek and Sullivans Creek is generally poor for supporting ecological values, and fair for recreational and aesthetic values. Lake Tuggeranong, Lake Burley Griffin and Lake Ginninderra are also rated as fair to poor in supporting recreational and aesthetic values. These lakes have been closed for recreation at times due to poor water quality which is a key concern for the community. Despite these challenges, the *State of the Lakes and Waterways in the ACT report* found that Lake Burley Griffin plays an important role in mitigating the impacts of urbanisation by trapping phosphorus and nitrogen and reducing turbidity, helping to protect downstream water quality.

All urban lakes, ponds and waterways in the ACT are either constructed or highly modified. Generally, the original purpose of these waterbodies was to mitigate flooding and remove pollutants from stormwater to protect the quality of water in downstream waterways and lakes. This means that many of the ACT's urban waterways, lakes and ponds are designed in a manner that does not align with the best outcomes for amenity, recreation and ecological functions.

The condition of the Territory's urban waterbodies is affected by urban development and management practices. Development activities can increase erosion and sediment levels in stormwater, alter natural flow regimes and introduce pollution from transport and other urban sources. Management practices such as installing gross pollutant traps, composting lawn and leaf litter, optimising fertiliser use, and regular street sweeping can help reduce nutrient and pollutant loads entering waterways.

Traditional urban development also contributes to increased impervious surfaces – such as roads, rooftops and pavements – which affect both the volume and quality of stormwater runoff. Stormwater can contain high levels of nutrients, such as phosphorus and nitrogen, as well as sediment. If not effectively managed, these pollutants can enter lakes, ponds, and waterways, contributing to issues such as blue-green algal blooms.

To address these challenges, ACT Government policies promote sustainable urban development and water-sensitive planning. Key guiding documents include the ACT Planning Strategy 2018, Canberra's Living Infrastructure Plan: Cooling the City, Urban Open Space Land Management Plan, and ACT Biodiversity Sensitive Urban Design Guide.

Non-urban catchments and waterbodies

The ACT's non-urban catchments – including conservation, water supply and rural catchments - are generally in better condition than the Territory's urban waterways. However, their condition has declined markedly since European settlement. The condition of these non-urban waterways is affected by both historical and current rural land management practices. Such practices affect water quality, alter runoff patterns, and contribute to erosion and sediment deposition in waterways. For example, soil erosion triggered by pastoral activities by early settlers increased sediment supply by 200 times, leading to massive deposits of sand in rivers that persist to this day.[3]

The health of the Territory's waterbodies impacts, and is impacted by, the condition of the catchment surrounding the ACT. Water diversions from Tantangara Dam into the Snowy Scheme, along with the interception of rainfall run-off in farm dams, reduce downstream river flows. Environmental flows are released from Tantangara Dam under statutory instruments to preserve a share of the river flow to protect key environmental values and ecosystem functions. While these flows have increased over the past decade, they still typically represent less than 10% of natural flow in the upper Murrumbidgee River. Ongoing challenges such as altered stream structure, water quality issues and sediment slugs continue to require active management.

A range of other factors affect the condition of the ACT's non-urban catchments. These include the clearing of riparian zone vegetation, water pollution, channel erosion and sedimentation, trampling and nutrient enrichment by livestock, fishing for food and sport, the introduction of weeds, diseases, alien fish and other pests, and the fragmentation of waterways into patches of good habitat interspersed among poor habitat.[4] As a result, the condition of rural waterbodies and catchments ranges from good to poor[5] at a reach-scale and across key habitat attributes. These pressures have had a significant impact on the ACT's native flora and fauna, with five species of fish and crayfish listed as threatened under the *Nature Conservation Act 2014* (ACT) and *Environment Protection and Biodiversity Conservation Act 1999* (Cth).



Figure 6: Two-spined Blackfish (listed as threatened) at Cotter River

Catchments that are managed for conservation and water supply are generally in better ecological condition than rural catchments. These catchments typically support more extensive and diverse native vegetation cover, both across the landscape and along the riverbanks. This can be seen within the Namadgi National Park, the Cotter River Catchment upstream of Cotter Dam, Googong River and the Queanbeyan River catchment which are protected for conservation and drinking water purposes. These catchments also tend to have healthier aquatic ecosystems, stronger macroinvertebrates communities, and better riparian condition. They serve as key refuges for threatened fish and crayfish species, and well as other sensitive biota.

Our waterbodies and water resources are under increasing pressure

The impacts of a changing climate, population growth, urbanisation and ageing water infrastructure assets are increasing pressures for effective water management in the ACT.

Climate change

While the ACT has historically experienced natural climate variability, the impacts of climate change will continue to make this variability more extreme and drive changes in longer-term average conditions. Climate projections from the NARCLiM2.0[6] modelling project outline low, medium and high emission scenarios, under which the ACT is expected to become warmer, with more hot days and fewer cooler days, and increasingly variable rainfall. These changes have important implications for water management in the ACT. A summary of potential impacts is provided in Table 2.

Table 2: Climate change trends and potential impacts[7]

Trend		Potential impacts
	Variable rainfall, with more frequent and prolonged droughts	Drought conditions, if not planned for and managed well, could lead to more frequent, severe and prolonged water restrictions. More frequent and prolonged droughts may also impact aquatic ecosystems, recreation, amenity and the overall liveability of the ACT. This will also likely lead to economic and commercial impacts for the community.
	Increasing frequency and severity of storms	More frequent and severe storms will increase erosion and stormwater runoff, including flash flooding, which can degrade water quality in waterways, lakes and reservoirs. These events will likely result in increased damage to property and infrastructure.
	Increasing temperatures, with more hot days, and fewer cold nights.	Higher temperatures are expected to increase water demand for environmental, drinking water, and irrigation needs.
	Average fire weather and the number of severe fire weather days are projected to increase	Increased frequency of fire weather conditions will likely lead to more frequent and severe bushfire events, which pose additional risks to water runoff quality and quantity. These events also place greater demand on water sources to support bushfire fighting.

Population growth

The ACT's population is projected to grow to approximately 784,000 people by 2060, which is a 70% increase compared to 2021.[8] In addition to this, population growth is expected in the surrounding local government areas including Queanbeyan–Palerang, Snowy–Monaro and Yass Valley. This regional growth will drive a directly proportional increase in the demand for water and wastewater services, requiring coordinated planning and management across jurisdictions.

A growing urban footprint

Population growth will likely impact the ACT's urban footprint and population density. Changes to the urban landscape could impact the volume and quality of stormwater runoff, which affects the downstream health of waterbodies. ACT Government policies that guide sustainable urban development – such as the ACT Planning Strategy 2018 and Canberra's Living Infrastructure Plan: Cooling the City – provide a strategic framework for managing these changes. Given the projected population growth, it is essential that land use and catchment management practices prioritise the protection of environmental conditions, including water quality, across the ACT and surrounding region catchment area.

Ageing infrastructure

Water and Wastewater

A significant proportion of the ACT's water and wastewater assets were built during Canberra's rapid expansion in the late 1960s and early 1970s. This includes key assets such as the LMWQCC and multiple water reservoirs across the city. Icon Water has been progressively planning for essential upgrades to these core elements and other components of the broader network and treatment systems.

Stormwater

The ACT's extensive stormwater network is also ageing. Ongoing maintenance and renewal of these assets is essential to protect private and public infrastructure from flooding, and to safeguard the health of waterbodies in the ACT and surrounding region catchment area.

Implications of these trends for water management in the ACT

The combination of population growth, climate variability and ageing infrastructure presents significant challenges for water management in the ACT, both now and in the future. As drinking water supplies become more vulnerable to climate impacts and demand rises across the ACT and the surrounding catchment region, pressure on water services and infrastructure will intensify. These trends will also drive changes in land use and management practices, which may affect the condition and resilience of the ACT's waterbodies.

This Strategy, supported by implementation plans, will guide how we adapt and respond to current and emerging water-related challenges.

Preparing for the Future

As the region continues to evolve and pressures on water resources grow, sustained collaboration and adaptive approaches will be essential. To guide action toward the Strategy's vision, four high-level outcome areas—each accompanied by an aspiration statement—have been identified. These outcomes are designed to work in concert, supporting adaptive management and enabling the balancing of diverse values and interests across the ACT and its surrounding catchments. They are not presented in order of priority, as each holds equal importance in achieving the Strategy's shared vision.

Vision

Working together, managing water wisely to support a vibrant, sustainable and thriving region

Outcome areas for 2030 - 2045



Outcome 1: Healthy catchments and waterbodies

Well managed, climate resilient and functioning catchments and waterbodies that support the liveability and environmental values of the ACT



Outcome 2: Sustainable water resources used efficiently

The ACT has an integrated, sustainable and climate resilient water system that meets the diverse water needs across the ACT



Outcome 3: A community that values water and enjoys clean, healthy catchments

An engaged ACT community that values water and proactively cares for catchments, water resources and waterbodies to support actions that deliver safe, clean water for drinking, recreation, the environment and to support cultural values



Outcome 4: Caring for water with Traditional Custodians

Traditional Custodians are partners in water planning, policy and management, and have access to water guided by self-determined priorities

The Strategy's four outcomes are described in more detail in the following sections, along with the key challenges and opportunities for achieving them. Each outcome's aspiration statements will guide implementation. Strategic actions to deliver these outcomes will be included in implementation plans, to be developed every five years.

Outcome 1: Healthy catchments and waterbodies

Where we want to be by 2045 and beyond

By 2045 and beyond:

Outcome 1: Healthy catchments and waterbodies	Well managed, climate resilient and functioning catchments and waterbodies that support the liveability and environmental values of the ACT

Outcome aspiration:

1.a *Water sensitive urban landscapes*: Urban landscapes are water sensitive, where urban development, stormwater and wastewater are managed to:

- Balance ecosystem health, community amenity, infrastructure efficiency, and place-based cultural values
- Support urban greening, cooling, recreation, public health and amenity
- Protect the health of waterbodies
- Support flood risk management.

1.b *Healthy waterbodies*: Waterways, lakes, riparian zones and catchments support healthy flora and fauna populations; provide wildlife habitat and corridors; support drinking water supply and public health; support recreational and cultural values; and are resilient to climate change and flood impacts. The condition of healthy waterbodies reflects the values of Traditional Custodians and other environmentally connected people, recognising that water health is inseparable from the health of Country and all living relationships.

1.c *Water for the environment*: We continue to support sustainable water use while meeting the current and future critical environmental water needs of surface and groundwater dependent ecosystems. These needs are informed by both scientific understanding and Traditional ecological knowledge of Country's water requirements.

1.d *Integrated land and water management*: Urban development, rural land, and catchments are managed at a regional scale using an integrated, multidisciplinary approach that reflects both contemporary thinking and Traditional Knowledge of Country's interconnectedness.

Challenges and opportunities for achieving healthy catchments and waterbodies

Increasing impacts from climate change and population growth are likely to intensify pressures on the ACT's catchments and waterbodies. These pressures include changes in runoff patterns (including flash flooding), altered stream flows, and declining water quality.

Managing climate risks

The ACT's urban and non-urban waterbodies support a wide range of sometimes competing values and uses, including water supply, agriculture, irrigation for public green spaces, habitat and wildlife conservation, cultural values, and recreation. Climate change will make it more challenging to balance these values and uses and will require the water sector to actively manage climate related risks.

Urban design and development

Pressures from increasing urban development and the need to service both new and existing urban areas with stormwater asset planning, delivery, renewals and maintenance are significant challenges for protecting the health of our catchments and waterbodies. If not managed, these pressures will intensify as land and urban development increase to support population growth.



Figure 7: A naturalised Healthy Waterways stormwater drain between Corlette Crescent and Charlotte Street in Monash

Urban design and development, in both new and existing urban areas, provide an opportunity to protect and improve waterway health and enhance urban environments. For example, retaining water within the urban landscape can help mitigate the effects of increased stormwater runoff and pollution, while also supporting urban cooling and amenity.

A range of frameworks and design concepts can guide improved water use and management in urban settings to support environmental, social, cultural, recreational, amenity, aesthetic and economic values. These include Water Sensitive Urban Design (WSUD), Water Sensitive Cities, Integrated Water Cycle Management (IWCM) and Biodiversity Sensitive Urban Design (BSUD) (refer to the glossary for definitions). By integrating water considerations into urban design and development, it is possible to strengthen water security, create greener and cooler urban landscapes, support a thriving Blue-Green Network, protect local waterbodies and promote culturally sensitive design.

The design and management of urban waterways, lakes and ponds has evolved over time to better reflect social and amenity values. However, tensions remain between their original purpose – such as flood mitigation and pollution control - and the growing community expectations for recreational, aesthetic, and ecological benefits. While there are opportunities to better balance these objectives, achieving this may not be feasible for all locations.

Regional catchment management

Land use and catchment management upstream in NSW and within the ACT affect the health of waterbodies across the region. The interrelationship between catchment management and waterway health highlights the need for coordinated and integrated water management across the upper Murrumbidgee River Catchment. A regional approach to catchment management enables more effective responses to complex, cross-boundary issues that cannot be addressed in isolation.

The ACT and Region Catchment Management Coordination Group, established under the *Water Resources Act 2007* (ACT), is a statutory advisory body that facilitates governance and coordination of water activities across the ACT and region catchment area. This group continues to have an important role in improving catchment and waterway health.

Community-led special interest groups also contribute to the protection and enhancement of regional catchments and waterbodies, supporting local stewardship and on-ground action.



Figure 8: Aerial view of the Sanctuary Loop at Tidbinbilla Nature Reserve

Outcome 2: Sustainable water resources used efficiently

Where we want to be by 2045 and beyond

By 2045 and beyond:

Outcome 2: Sustainable water resources used efficiently	The ACT has an integrated, sustainable and climate resilient water system that meets the diverse water needs across the ACT

Outcome aspiration:

2.a *Water for future generations*: We have a secure, climate-resilient water supply that meets the current and future water needs of the ACT. The ACT has water to support:

- Reliable, accessible drinking water that is used efficiently
- Ecological health of waterbodies and catchments
- Cultural and recreational values
- Efficient non-potable water use
- Sustainable population growth and development.

This aspiration is shaped by contemporary scientific knowledge and the enduring cultural responsibilities of Traditional Custodians, who have cared for Country for tens of thousands of years.

2.b *Diverse water sources*: Water needs are met by optimising the use of all available water sources, and through water conservation and efficiency. Diversification strategies draw on both technological innovation and Traditional perspectives.

2.c *Regional approach*: Regional water security is supported through collaborative efforts from the ACT, NSW and Commonwealth Governments and communities within the ACT and region catchment area. Regional collaboration requires recognising different governance systems and knowledge frameworks, including Traditional Custodian water management practices.

Securing the ACT's water future is critical to achieving this outcome. This includes delivering safe, reliable, and climate-resilient water services that are economically viable and environmentally sustainable. Achieving water security also requires a regional lens – recognising the interdependencies across sectors, such as energy, food production, public health, regional planning and environmental protection. A holistic, and integrated approach to water security planning and delivery is essential. This approach also acknowledges the deep interconnectedness between landscapes, waterways, and the systems they support, and is informed by enduring cultural foundations that recognise the intrinsic value of water within the broader environment.

'**Water security**' **for the ACT means that water needs – encompassing quantity, quality, and affordability and access – can be met, now and for future generations, while balancing other environmental, cultural, social and economic water needs.**[9]

Where quantity, quality, and affordability and access are defined as:

Quantity: adequate volume and reliability of water supply to meet water needs and expectations, with reference to the potable water supply level of service target for Icon Water and the Water Resources Environmental Flow Guidelines.

Quality: water that is safe and meets the needs for its intended use, as defined in the Water Use and Catchment General Code, the Environment Protection Regulation 2005 and the ACT Drinking Water Code of Practice 2007.

Affordability and access: managing financial and other barriers to adequate quantity and quality of supply, particularly for vulnerable water users and the environment.

The water supply level of service target guides Icon Water's operational planning for Canberra's water supply system. These targets will be periodically reviewed to ensure that they are fit-for-purpose.

The ACT Government recognises Icon Water's critical role in the supply of essential water and wastewater services to the Canberra community, including sourcing, treatment, and supply of water, as well as the management of wastewater services.

In response to the ACT's projected growth and the increasing impacts of climate change, Icon Water is actively planning for the future. As part of this work, it is developing an Integrated Water Management Program (IWMP) to strengthen the resilience of water and wastewater systems. The IWMP will ensure that service strategies, including the Drought Management Plan are well-integrated and coordinated, supporting long term water security and service reliability for the ACT.

The ACT Government and Icon Water remain committed to working collaboratively in advancing integrated and sustainable water cycle management across the Territory.

Challenges and opportunities for providing long-term water security for the Territory

The combined impacts of population growth and climate change are expected to increase demand for water while reducing the reliability of existing sources. To respond to this challenge, the ACT must transition to a more climate resilient water supply that makes efficient use of diverse water sources.

To ensure a coordinated and future focused approach, planning will be guided by principles aligned with the National Urban Water Planning Principles:[10]

- Environmental sustainability –the environmental needs are protected, and where possible, condition enhanced.
- Critical human water needs – water needed during drought for drinking, food preparation and hygiene, and essential community services (including emergency services, hospitals and schools) can be maintained under plausible climate projections.
- Cultural appropriateness – cultural water values are protected through the integration of Traditional Knowledge and participation of Traditional Custodians in water planning.
- Economic efficiency – water supply services provide value for money for the community with consideration of wider social, cultural, environmental and financial outcomes as well as customer costs.
- Financial sustainability –the whole-of-life costs for water planning, management and services can be met through affordable cost recovery.
- Resilience to climate variability and impacts of climate change.
- Community involvement –community are enabled to engage in water planning and management through two-way sharing of information on issues and values, publicly accessible water data, and transparency in decision-making.

The ACT Water Strategy and ACT Climate Change Strategy are closely aligned, with each delivering complementary benefits. Climate action supports water resilience, while sustainable water management contributes to climate goals. Implementation will consider actions that reinforce both strategies and maximise shared outcomes.

Evidence based policy and planning

The ACT's water supply is inherently vulnerable to climate change and extreme events. Urban water use is largely dependent on surface water sourced from the Cotter, Queanbeyan, Molonglo and Murrumbidgee river catchments. Icon Water's water resource modelling indicates that the water supply system is performing as required. However, looking ahead and considering population growth and the increasing impacts from climate change, Canberra may require its next water source by 2040.

To prepare for this, Icon Water is progressing investigations into a range of water source options, including both new surface water options and climate-independent options. In parallel, the ACT Government has completed the ACT Water Security Vulnerability Assessment Project which evaluated the current and future vulnerability of the Territory's water resources. The assessment considered a broad range of values relating to supply and demand of potable and non-potable water, water quality, aquatic and riparian ecosystem health, and socio-economic factors.

The project modelled water supply vulnerabilities for the ACT at year 2050, focusing on potable water supply, non-potable water supply, and environmental water for the whole of ACT. It provided a baseline assessment – assuming no change to operating rules, policy and no further infrastructure augmentation – from which the effectiveness of future water security interventions can be assessed in the future.

A technical report titled Assessment of potable, non-potable and environmental water indicators: ACT Water Security Vulnerability Assessments has been published on the ACT Government website.

Regional water management

While State and Territory governments are primarily responsible for the water supply in their respective jurisdictions, a regional and holistic approach to water resource management supports mutual shared benefits across the ACT and surrounding catchment areas. This approach requires flexibility in operational arrangements, while continuing to honour existing resource sharing agreements and jurisdictional responsibilities.

Water use in the ACT must comply with water-sharing arrangements under the Basin Plan and be consistent with broader national water policies. The Basin Plan provides a framework for sustainable water use across the ACT and region catchment area. The Basin Plan presents both challenges and opportunities in sustainably meeting the diverse water needs and values of the ACT community. It also requires the respectful consideration of cross-border impacts, recognising that water management decisions in one jurisdiction can affect others.

In the ACT and region catchment area, this includes alignment with the NSW Snowy Water Licence and regional water quality management initiatives.



Figure 9: Pine Island

Outcome 3: A community that values water and enjoys clean, healthy catchments

Where we want to be by 2030 and beyond

By 2030 and beyond:

Outcome 3: A community that values water and enjoys clean, healthy catchments	An engaged ACT community that values water and proactively cares for catchments, water resources and waterbodies to support actions that deliver safe, clean water for drinking, recreation, the environment and to support cultural values

Outcome aspiration:

3.a *Community water knowledge*: An understanding of the local and regional water context is an ongoing part of living in the ACT and underpins the community valuing water and engaging on water related issues. Water knowledge encompasses both technical expertise and cultural relationships with water, acknowledging the diverse ways in which communities understand and value and interact with our water systems.

3.b *Dynamic information sharing*: There is an ongoing, interactive knowledge exchange within and between the water sector and the community, allowing the community to easily find information and contribute ideas, observations, insights and perspectives on water matters. Information sharing recognises Traditional Knowledge, scientific knowledge, community observations, and professional expertise as complementary and equally valuable ways of understanding water.

3.c *Community valuing water*: The community understands the value of water to the ACT and region catchment area, and the challenges associated with managing water resources and protecting our catchments. Water values encompass Traditional Custodians' spiritual and cultural connections, community social and recreational values, environmental values, and economic values as interconnected rather than competing.

3.d *Community input into decision-making*: Community values and input informs decision making in water and catchment management, planning and investment. Decision-making processes acknowledge the diverse perspectives within the community and create space for all voices to be heard.

3.e *Community benefit and partnerships*: Opportunities for projects and programs to enhance community benefit are identified and embedded in design and delivery. This includes opportunities to deliver projects or programs in partnership between the community and the water sector, drawing on diverse knowledge systems and value frameworks to foster mutual benefit and shared learning.

Challenges and opportunities for a community that values water

A shared vision for how water should be managed now and for future generations is built through strong partnerships between the community and the water sector. Unlike the other outcome areas, this Outcome is set to be achieved by 2030, with continued maintenance throughout the remainder of this Strategy period.

Everyone in the ACT has a role in caring for our waterbodies and ensuring water is managed sustainably. This can range from using water wisely at home, school and work, to actively participating in community-led special interest groups. Accessible water information and water education programs foster a shared understanding of the complexities involved in caring for catchments and securing water for the future.

Key activities and initiatives that support this outcome include:

- Community groups such as the Conservation Council ACT Region, Landcare ACT, catchment groups, the ACT and Region Catchment Management and Coordination Group, the Upper Murrumbidgee Catchment Network and the Upper Murrumbidgee Demonstration Reach
- ACT Government supported community education and engagement programs such as Waterwatch and the Leaf Collective
- The Icon Water Education program

There is a wealth of knowledge, perspectives and ideas within the broader community and groups that contributes to innovation and ambition in the water sector. Working together is underpinned by information sharing and participation, creating pathways for the community to contribute their insights into water planning and management.



Figure 10: School children learning about waterways and lakes

Outcome 4: Caring for water with Traditional Custodians

Where we want to be by 2045 and beyond

By 2045 and beyond:

Outcome 4: Caring for water with Traditional Custodians	Traditional Custodians are partners in water planning, policy and management, and have access to water guided by self-determined priorities

Outcome aspiration:

4.a *Water policy, planning and management*: Traditional Knowledge, rights, interests and aspirations of Traditional Custodians are incorporated in water policy, planning and management in the ACT, recognising this as not merely supplementary information, but as a holistic framework for managing Country.

4.b *Partnerships*: Traditional Custodians and the ACT Government work in partnership to support healthy catchments and waterbodies.

4.c *Traditional values and uses*: Cultural values and uses are integrated into water planning and management through knowledge sharing and capacity building. Traditional values represent complete relationships with Country that encompass environmental, social, economic, and spiritual dimensions simultaneously. These can support how others also value Country.

4.d *Self-determination and economic participation*: Traditional Custodians own, manage and access water that empowers economic self-determination through:

- Access to water entitlements and licences consistent with the National Agreement on Closing the Gap.
- Effective governance arrangements, education and knowledge sharing on water resource management.
- Increased employment of First Nations people in the ACT water sector.
- Ensuring Traditional Custodians have pathways for self-determination and economic participation enhances their leadership in managing water resources.

Challenges and opportunities for caring for water with Traditional Custodians and other First Nations people

There is a commitment to respectfully incorporate Traditional Knowledge and decision-making structures into government processes, recognising the enduring value of cultural knowledge systems alongside scientific methods.

This Strategy reflects the early stages of a long and meaningful journey in partnership. Conversations about caring for water are ongoing and grounded in mutual respect. We are committed to continuing these partnerships through tangible actions identified in the implementation plan.

Supporting participation and engagement will be a priority throughout the implementation, with a focus on actions that are co-developed and achievable. To support ongoing cultural connection, water policy, planning and management should be guided by holistic approaches to Country, developed collaboratively.

What we have heard so far

The Territory's waterbodies hold deep cultural significance for Traditional Custodians and other people and families with connection to the lands and waters of the ACT and surrounding region.

Traditional Custodians and other First Nations peoples have maintained deep cultural connections to Country, "Dhawura", and its waterways, "Ngurung" in Ngunnawal language, across the ACT and region for many thousands of years. Elders speak of a history that began in time immemorial and continue to assert their cultural right to speak for Country and its waterways. These rights are handed down by their ancestors through lore, language and ceremony, with cultural practices that support the spiritual, social, and environmental wellbeing of Country and its people.

For thousands of years, Traditional Custodians have managed Country using Traditional Knowledge and cultural practices that nurtured the health of both land and water. Their understanding reflects an interconnected relationship between land and water that cannot be separated – demonstrated, for example, by the waterbirds feeding on fish, and plants relying on both soil and water. This holistic view continues to guide First Nations stewardship of Country today.

National Agreement on Closing the Gap

The National Agreement on Closing the Gap is underpinned by four Priority Reforms:

- Formal partnerships and shared decision making
- Building the community-controlled sector
- Transforming government organisations
- Shared access to data and information at a regional scale.

Delivering these reforms supports shared benefits across the ACT community, advances the water interests and rights of Traditional Custodians and other people and families, and enhances water management practices through the integration of Traditional Knowledge. Successful partnerships are dependent on being co-designed, underpinned by mutual respect, guided by self-determination, and designed to be holistic and sustainable.

Traditional Custodians and other people and families with connection to the lands and waters of the ACT and region will be supported through the recognition of the cultural values and uses. The Aboriginal Waterway Assessments (AWAs) provide one mechanism for capturing and sharing knowledge about these values and uses in a format that can be incorporated into water planning.

Water agencies will continue to support cultural connection and broader aspirations through the establishment of Cultural Flows. Cultural Flows are water entitlements that are legally owned by the First Nations people and communities to improve their spiritual, cultural, environmental, social, and economic wellbeing. Supporting First Nations people's economic participation is important to enabling self-determination and achieving economic independence.



Figure 11: Ngunnawal Traditional Custodians undertaking an Aboriginal Waterway Assessment

Implementing the Strategy

Implementation plans

The ACT Government, in collaboration with the water sector, will prepare an implementation plan for this Strategy every five years. Each implementation plan will set out specific actions to achieve the strategy's outcomes and aspirations, including responsibilities, timeframes, and mechanisms for monitoring, evaluation and reporting.

The implementation plans will also identify Strategy enablers, which are foundational actions that will support the ACT community and water sector in delivering the Strategy effectively. These enablers will be updated in each implementation plan and will relate to:

- Governance, institutional, policy and regulatory arrangements
- Capability and capacity, partnerships, and research and innovation
- Business systems and processes, data and analytics, and technology and digital platforms.

Each new implementation plan will build on the achievements and lessons of the previous five years, incorporating new knowledge and responding to changes in context. This approach ensures continued focus on the most important issues and priorities.

Implementation plans will also reflect any broader policy commitments made by the ACT Government to deliver on national and Murray-Darling Basin water reforms, ensuring alignment with regional and national objectives.

Resourcing is fundamental to successful delivery and will be a key consideration in the development of Implementation Plans.

Strategy evaluation and reporting

The ACT Government will publish an annual report card that will track progress on the actions outlined in each implementation plan. This will help keep the community informed and ensure transparency in how the Strategy is being delivered.

In addition to annual reporting, a more comprehensive evaluation will be undertaken every five years. The evaluation will reflect on the progress and achievements of the previous implementation plan, identify emerging risks, and assess outcomes across key evaluation themes. It will draw on monitoring data, modelling, and other relevant information.

The findings from each evaluation will help shape the next implementation plan, ensuring it reflects lessons learned and responds to new challenges and opportunities. New government initiatives will be integrated through annual reporting, maintaining continuity while adapting to evolving priorities.

A full review of this Strategy will be undertaken by 2035, providing an opportunity to take stock of long-term progress and refine the path toward achieving the 2045 Vision.

Evaluation themes

Outcome 1 – Healthy catchments and waterbodies

- Aquatic ecosystem health across the ACT in both urban and non-urban environments.
- Ecosystem function in aquatic and riparian environments.

Outcome 2 – Sustainable resources used efficiently

- Sufficient, safe and affordable water is available for people now and into the future.
- Equitable access to water supports cultural, and environmental and community values.
- Water management adapts to change and contributes to broader social, environmental and economic goals.

Outcome 3 – A community that values water and enjoys clean, healthy catchments

- Knowledge building among the community of water-related issues and values.
- Community participation and engagement in planning and program/project delivery.

Outcome 4 – Caring for water with Traditional Custodians

- Strength and quality of partnerships.
- Recognition and integration of cultural values and knowledge.
- Participation in water planning and decision making.

Further information on how and when responsible agencies monitor, evaluate and report on progress will be outlined in the implementation plans.

Glossary of terms

ACT

Australian Capital Territory

ACT and region catchment area

Covers an area upstream of the Burrinjuck Dam, which includes the ACT, the Murrumbidgee River Catchment upstream of Burrinjuck Dam, excluding the upper Goodradigbee River in the Tumut local government area, the Murrumbidgee component of the Snowy Monaro Regional Council and lands outside the upper Murrumbidgee River Catchment to the east including the local government areas of Queanbeyan-Palerang Regional Council and the Yass Valley Council.

ACT and Region Catchment Management Coordination Group

A statutory advisory group established under the *Water Resources Act 2007* (ACT) to facilitate improved governance and coordination of water activities within the ACT and region catchment area.

ACTESA

ACT Emergency Services Agency

ACTHD

ACT Health Directorate

Aquatic area

A water course that is covered permanently or intermittently by water and includes the water in the channel, substrate, and plants and animals that are completely or substantially dependent on being covered by water. It also includes the habitat for these plants and animals.

Aquifer

A geological formation or structure, or an artificial landfill, permeated or capable of being permeated (whether permanently or intermittently) with water.

AWA

Aboriginal Water Assessment: culturally ground tools used by Traditional Custodians and First Nations peoples to assess the health and cultural significance of water ways across the ACT. Supports self-determination by enabling Traditional Custodians and First Nations peoples to document and share knowledge from their own perspectives. Inform water planning and management.

Biodiversity Sensitive Urban Design (BSUD)

An approach to planning and development that recognises biodiversity as an opportunity rather than a constraint. The application of BSUD mitigates the detrimental impacts of urbanisation, such as habitat loss and fragmentation, while facilitating necessary and positive human-nature interactions. The key themes of BSUD are:

- Maintain and enhance nature – avoid and minimise loss of native habitat and biodiversity
- Connect and extend nature – ensure that biodiversity connectivity is maintained across the landscape
- Minimise threats to protect nature – ensure that threats to biodiversity such as noise, light pollution, invasive species incursions or establishment, chemical pollution, or site disturbance are avoided or minimised through good design/planning, and
- Connect people to nature – create positive engagement with nature through mechanisms such as recreation, active travel and landscaping.

Blue-Green Network

The Blue-Green Network is the connection and interaction between water-based and land-based natural or semi-natural spaces across the ACT. 'Blue' refers to waterways including creeks and wetlands within the landscape. 'Green' refers to the trees, urban forests, gardens, parks and open space.

Catchment

An area where water falling as rain is collected by the landscape, eventually flowing to a body of water such as a creek, river, dam, lake, ocean, or into a groundwater system.

CED

City and Environment Directorate

CMTEDD

Chief Minister, Treasury and Economic Development Directorate

Conservation catchments

Catchment areas that incorporate those lakes, streams and wetlands for which the primary value is conservation of aquatic habitats (natural and modified), migratory routes or landscape qualities.

Cultural Flows

Water entitlements that are legally owned by the First Nations people and communities to improve the spiritual, cultural, environmental, social, and economic health and wellbeing.

Ecosystem

A dynamic combination of plant, animal and microorganism communities and their non-living environment (e.g. soil, water and the climatic regime) interacting as a functional unit. Examples of types of ecosystems include forests, wetlands and grasslands.

Ecosystem services

The benefits people obtain from functioning ecosystems. These include provisioning services such as food and water; regulating services such as urban cooling and flood control; cultural services such as recreational and cultural benefits; and supporting services such as nutrient cycling.

EPA

Environment Protection Authority

Integrated water cycle management (IWCM)

A whole of system, multidisciplinary approach that aims to manage the entire urban water cycle by integrating the delivery of water, wastewater, and stormwater services to contribute to the full suite of water security, public health, environmental and urban amenity outcomes that the community seeks.

JACS

Justice and Community Safety Directorate

Licensed water

Licensed water refers to water taken under a Licence, which is administered under the *Water Resources Act 2007* (ACT).

Liveability

A measure of quality of life used to benchmark cities around the world. It includes socio-economic, environmental, transport and recreational measures.

LMWQCC

Lower Molonglo Water Quality Control Centre

MDB

Murray Darling Basin

NCA

National Capital Authority

NSW

New South Wales

NWI

National Water Initiative

Non-Potable Water

Water that is untreated and is not safe for drinking but can be used for other purposes.

Potable water

Water that is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines 2004, or equivalent.

Ramsar wetland

A site recognised under the Ramsar Convention for its importance to biodiversity, especially for supporting wildlife, water quality, and climate regulation. These wetlands are protected for their ecological value and must be managed sustainably to preserve their natural functions.

Recycled water

Water derived from sewerage systems or industry processes that is treated to a standard appropriate for its intended use.

Resilience

The capacity of individuals, communities, businesses and systems in a region to survive, adapt and thrive, no matter what chronic stresses and acute shocks they experience.

Riparian zone

Any land that adjoins, directly influences or is influenced by a body of water. For this Strategy, the riparian zone is an area of terrestrial land that affects, and is affected by, flowing water of the adjacent waterbody. This land tends to consist of landforms that are caused by river processes and may contain vegetation communities that are characteristic of areas affected by the hydrology of an adjacent waterbody.

Rural catchments

Catchment areas that support pastoral and cropping activities and are managed by farm lessees (ACT) and landowners (NSW).

Stormwater

Water run-off from an urban area that is normally collected by the stormwater system.

Urban catchments

Catchment areas that comprise Canberra and nearby Queanbeyan, NSW. Small leases are managed by residents and businesses while the ACT Government manages green space within the ACT.

Urban footprint

The geographic extent of the existing urban area.

Water sector

Participants involved in policy, regulation and delivery of water resource management, water quantity, quality, ecology and water services across the water cycle, including governments, regulators, catchment managers, river operators, water utilities, researchers, private sector service providers and community-led special interest groups. The water sector interacts with customers, the community and other organisations that influence water management, such as urban planners, developers, Traditional Custodians, Non-Government Organisations and other government agencies.

Water agencies

ACT Government agencies and Icon Water, who have primary responsibilities for water management in the ACT.

Water security

For the ACT means ensuring that water needs – encompassing quantity, quality, and affordability and access – can be met, now and for future generations, while balancing other environmental, cultural, social and economic water needs.

Where quantity, quality and affordability and access are defined as:

- **Quantity**: adequate volume and reliability of water supply to meet water needs and expectations, with reference to the potable water supply level of service target for Icon Water and the Water Resources Environmental Flow Guidelines.
- **Quality**: water that is safe and meets the needs for its intended use, as defined in the Water Use and Catchment General Code, the Environment Protection Regulation 2005 and the Public Health (Drinking Water) Code of Practice 2007.
- **Affordability and access**: managing financial and other barriers to adequate quantity and quality of supply, particularly for vulnerable water users.

Water sensitive city

A city that:

- Serves as a potential water supply catchment, providing a range of different water sources at a range of different scales, and for a range of different uses
- Provides ecosystem services and a healthy natural environment, thereby offering a range of social, ecological, and economic benefits
- Consists of water sensitive communities where citizens have the knowledge and desire to make wise choices about water, are actively engaged in decision-making, and demonstrate positive behaviours such as conserving water at home and not tipping chemicals down the drain.

Water Sensitive Urban Design (WSUD)

The planning, design or construction of the built environment to minimise water runoff and ensure any runoff causes the least amount of damage. It is also about wise use of that water to improve our urban environment.

The key principles of WSUD are:

- Use different sources of water so we do not need to use as much drinking water. This might include rainwater, treated wastewater, and encouraging water-efficient appliances
- Reduce how much wastewater we create, and make sure it is treated so it can be reused and/or released to receiving waters
- Treat urban stormwater so it can be reused and/or released to surface waters
- Use stormwater in the urban landscape to improve the visual and recreational amenities of developments.

Water supply catchments

Catchment areas that incorporate those reservoirs and streams for which the primary value is domestic water supply.

Appendices

Appendix A: Policy, legislative and institutional context for water management in the ACT in 2025

Water management in the ACT is undertaken in the context of Commonwealth, regional and territory government level policy and institutional settings. These are further described below.

National water policy context

The National Water Initiative (NWI)[11] provides a nationally agreed blueprint for water reform and outlines a best practice water management framework and principles for the sustainable management of Australia's water resources. The ACT Government is a signatory to the 2004 Council of Australian Governments' NWI and has committed to implementing various national level reforms. The NWI is currently being renewed, which offers the opportunity to strengthen the framework by better addressing the impacts of climate change, enhancing First Nations' participation in water resource management, ensuring access to safe and secure drinking water and adopting a more strategic approach to groundwater management.

Murray-Darling Basin policy and planning context

The ACT is located within the Murray-Darling Basin (MDB) and is subject to the requirements of the Murray–Darling Basin Plan 2012 (Basin Plan). The Basin Plan establishes a legislative framework for a coordinated and sustainable management of the Basin's water resources by the Australian Government, Murray-Darling Basin states (including the ACT), and the Murray–Darling Basin Authority, in collaboration with the community. It aims to balance competing demands for water, including those of the environment.

As a Basin jurisdiction, the ACT has important obligations under the plan. The ACT must comply with the Basin Plan's sustainable diversion limits, which define how much water can be sustainably taken for use in the ACT, while maintaining the health of waterbodies and the environment, and ensuring the quality and volume of water flowing out the Territory.

The ACT Water Resource Plan for Surface and Groundwater was accredited by the Commonwealth Minister responsible for water in 2020. Water Resource Plans are required under the Basin Plan to ensure that water resources in the Basin are managed consistently with the commitments under the Basin Plan and the *Water Act 2007* (Cth).

Regional context

Canberra is a city in the centre of the south-east region of NSW. The ACT-NSW Memorandum of Understanding for Regional Collaboration sets out the overall framework within which the ACT and NSW work together to deliver on a range of cross-border and regional matters, including water.

The ACT and Region Catchment Management Coordination Group is a statutory advisory group established under the *Water Resources Act 2007* (ACT) to facilitate improved governance and coordination of water-related activities within the ACT and region catchment area.

Regulatory and institutional arrangements for water management in the ACT

Key regulatory frameworks for water management

The *Seat of Government Acceptance Act 1909* (Cth) gives the Commonwealth Government paramount rights to the use and control of waters of the Queanbeyan and Molonglo Rivers and their tributaries – located to the east of the Cooma-Goulbourn railway – for all purposes of the ACT. The *Canberra Water Supply (Googong Dam) Act 1974* (Cth) regulates the use and disposal of water from the Googong Dam area, primarily for the ACT's use. Water may also be supplied to NSW, subject to agreement by the Commonwealth Government. The ACT has overall responsibility for water supply and land management within the dam area and has the power to carry out works in NSW as necessary for the Territory's water supply.

The *Water Resources Act 2007* (ACT) is the governing legislation for managing water resources in the ACT. It establishes access rights to surface and groundwater, sets environmental flow provisions, outlines water licensing requirements, defines responsibilities for water resource management and monitoring, and sets penalties for offences. Under this Act, the Environment Protection Authority (EPA) issues licences for the allocation and abstraction of water, bore drilling and construction of dams or modification of waterways.

Supporting instruments under the *Water Resources Act 2007* (ACT) include:

- The Water Resources Environmental Flow Guidelines, which specify the timing, volume and limits of environmental flows and abstraction limits in streams, rivers, lakes, and aquifers.
- The Water Use and Catchment General Code, which identifies permitted water uses and environmental values for waterways and sets the water quality and streamflow criteria to protect those uses and values.

The EPA also administers the *Environment Protection Act 1997* (ACT), which provides the regulatory framework for protecting and maintaining the quality of the ACT's environment by controlling the discharge of pollutants into air, land and water. Regulations made under the Act define pollutants that cause environmental harm to waterways and establish water quality standards aligned with the environmental values outlined in the Water Use and Catchment General Code. Environmental protection policies provide guidance for compliance with the *Environment Protection Act 1997* (ACT) and its regulation.

The *Lakes Act 1976* (ACT) regulates the use of and activities on ACT lakes including boating. At the time of preparing this Strategy, 15 waterbodies were declared 'lakes' under the Act. Lake Burley Griffin is regulated by the National Capital Authority (NCA) under the *Lakes Act 1976* (ACT).

The *Nature Conservation Act 2014* (ACT) preserves, conserves and enhances the biodiversity of the ACT. It provides action plans and research and monitoring programs for threatened species (flora and fauna) and ecosystems.

The *Planning Act 2023* (ACT) includes provisions related to water management, such as requirements for environmental impact assessments and considerations within development applications.

The *Public Health Act 1997* (ACT) regulates drinking water quality including the Public Health (Drinking Water) Code of Practice 2007.

The *Emergencies Act 2004* (ACT) establishes emergency planning, response and recovery operations within the ACT, including for scenarios involving flooding.

The *Utilities Act 2000* (ACT) sets out licensing requirements and conditions for utilities that provide water services, sewerage services and manage water supply networks. It also allows for regulations to set water conservation measures and water restrictions based on defined criteria. The *Utilities (Technical Regulation) Act 2014* (ACT) sets out technical and planning requirements for water utilities (including under technical codes), establishes the role of the Technical Regulator to ensure safe and reliable water services to the community, and includes provisions for dam safety.

The *Independent Competition and Regulatory Commission Act 1997 (ACT)* governs water and sewerage pricing, sets utility performance standards and enables investigations into water industry matters.

There are a range of other strategies, policies, plans, programs and groups that complement this Strategy to manage water in the ACT, most of which are listed in *Appendix B – Strategies, policies, plans, programs and groups in 2025 that complement this Strategy*.

Institutional arrangements for water management in the ACT

Water management responsibilities span across three ACT Government directorates (outlined below), the ACT's water utility Icon Water, and the National Capital Authority. Within each directorate, water management responsibilities are distributed across different teams.

Water management also interfaces Commonwealth Government agencies – such as the Department of Climate Change, Energy, Environment and Water and the Inspector-General of Water Compliance – as well as state governments (particularly other Murray-Darling Basin jurisdictions) and local governments. This creates a complex operating environment where effective coordination and collaboration are essential.

In addition, community-led special interest groups and the general public also make an important contribution to shaping and supporting water management outcomes.

Water management arrangements have undergone significant reform in recent years and continue to evolve. As of 2025, high-level responsibilities for water management in the ACT are distributed across a range of government agencies and stakeholders, as outlined below.

- **City and Environment Directorate** is responsible for planning, transport, city services and the environment. develops water policy and planning, undertakes development assessment approvals, and delivers programs to monitor and improve waterway health, protect drinking water catchments and catchment land management.
  - The **Office of Water** leads water policy and planning in the ACT. The Office works across government to coordinate cross-sectoral water issues through comprehensive and collaborative approaches, and plan for the sustainable management of water resources.
  - The **Office of the Conservator of Flora and Fauna** plays a key role in protecting the ACT's biodiversity. It oversees licensing for activities involving native species, approves translocations, manages nature reserves, and leads biodiversity research and monitoring.
  - The **EPA** administers and regulates the *Water Resources Act 2007 (ACT)* by managing water allocations and entitlements, compliance and enforcement activities. The EPA is responsible for protecting waterways by regulating pollution and enforcing water quality standards under the *Environment Protection Act 1997 (ACT)*.
  - The **Utilities Technical Regulation** regulates licensed utilities, including water and sewerage services, and unlicensed regulated utilities, such as dams, in accordance with the *Utilities (Technical Regulation) Act 2014 (ACT)*.
  - **Roads ACT** and **City Operations** manages and maintains stormwater infrastructure, including the Inner North Reticulation Network, as well as urban lakes and ponds in accordance with the Canberra Urban Lakes and Ponds Land Management Plan.

- **Health and Community Services Directorate** sets drinking water quality standards and monitors recreational water quality to ensure public safety at the ACT's swimming and boating spots.
- **Justice and Community Safety Directorate** (JACS) includes the **ACT Emergency Services Agency** which is responsible for planning, preparedness and response operations for emergencies such as storms and floods.
- The **Office of the Commissioner for Sustainability and the Environment** is an independent statutory body reviews water management practices and assesses the health of waterways across the ACT.
- **Icon Water** is responsible for planning, delivering, and maintaining water and wastewater services and infrastructure in the ACT. It manages urban water security, supplies bulk water to Queanbeyan, Jerrabomberra and Googong, enforces water conservation measures, monitors drinking water quality and quantity, and runs community education and engagement programs. Its operations are subject to environmental, technical, health, and economic regulations.
- The **National Capital Authority** manages the water quality and ecological health of Lake Burley Griffin and maintains infrastructure under its jurisdiction.

Appendix B: Strategies, policies, plans, programs and groups in 2025 that complement this Strategy

Existing strategies, policies, plans, programs and groups relating to Outcome 1: Healthy catchments and waterbodies

City and Environment Directorate:

- ACT Healthy Waterways program
- Inner North Reticulation Network (stormwater harvesting and managed aquifer recharge scheme, supplying non-drinking water to customers)
- ACT and Region Catchment Strategy 2016–2046 and Implementation Plan
- CanberraUrban Lakes and Ponds Land Management Plan
- ACT Aquatic and Riparian Conservation Strategy and Action Plans
- Nature Conservation Strategy 2013 – 23
- ACT Sphagnum Bog Rehabilitation and Monitoring Plan (2020–31)
- Connecting Nature, Connecting People
- Caring for Dhawura Ngunnawal: A natural resource plan for the ACT 2022-2042
- Water Resources Environmental Flow Guidelines 2019
- Long Term Watering Plan (in development)
- Territory Plan 2023 and the ACT Planning Strategy 2018
- Canberra's Living Infrastructure Plan: Cooling the City
- ACT Practice Guidelines for Water Sensitive Urban Design Module 1 and 2
- ACT Biodiversity Sensitive Urban Design Guide
- Environment Protection Guidelines for Construction and Land Development in the ACT
- Builders Booklet: Preventing pollution from residential building sites
- General Environment Protection Policy
- Contaminated Sites Environment Protection Policy
- Hazardous Materials Environment Protection Policy
- Water Quality Environment Protection Policy

Health and Community Services Directorate:

- ACT Guidelines for Recreational Water Quality

Justice and Community Services Directorate:

- ACT Territory Wide All Hazards Risk Register
- ACT Disaster Resilience Strategy 2024-2030
- ACT Strategic Flood Risk Management Plan (in development)
- The Australian Institute for Disaster Resilience Managing the Floodplain Handbook
- ACT Strategic Bushfire Management Plan

National Capital Authority:

- Lake Burley Griffin Recreation Policy 2017
- Lake Burley Griffin Water Quality Management Plan 2011

Existing strategies, policies, plans, programs and groups relating to Outcome 2: Sustainable water resources used efficiently

City and Environment Directorate:

- ACT Climate Change Strategy 2019-25
- ACT Circular Economy Strategy Action Plan 2023-30
- Inner North Reticulation Network (stormwater harvesting and managed aquifer recharge scheme, supplying non-drinking water to customers)

Health and Community Services Directorate:

- Public Health (Drinking Water) Code of Practice 2007

Icon Water:

- Growth Servicing Plan 2023-42
- Climate Change Adaptation Plan

Existing strategies, policies, plans, programs and groups relating to Outcome 3: A community that values water and enjoys clean, healthy catchments

- Connecting Nature, Connecting People (City and Environment Directorate)
- The ACT catchment groups
- Conservation Council ACT Region
- Landcare ACT
- The ACT and Region Catchment Management and Coordination Group
- The Upper Murrumbidgee Catchment Network
- The Upper Murrumbidgee Demonstration Reach
- Community education and engagement programs such as Waterwatch and the Leaf Collective
- The Icon Water Education program

Existing strategies, policies, plans, programs and groups relating to Outcome 4: Caring for water with Traditional Custodians

- The Aboriginal Water Assessment (AWA) is a First Nations-led and community-driven tool developed to advance First Nation's rights and interests in water planning, policy, and legislation. The tool was developed collaboratively with the Murray Lower Darling Rivers Indigenous Nations, the Northern Basin Aboriginal Nations, and the Murray-Darling Basin Authority. The AWA enables Traditional Custodians to use a cultural lens to assess the health of Country and set priorities for water and natural resource management.

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