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**THE LEGISLATIVE ASSEMBLY FOR THE
AUSTRALIAN CAPITAL TERRITORY**

TENTH ASSEMBLY

**Report by the Office of the Commissioner for Sustainability and the
Environment - Investigation into the State of Lakes and Waterways in the ACT
- Government Response**

**Presented by
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Introduction

On 3 March 2021, the Minister for the Environment directed the Commissioner for Sustainability and the Environment (the Commissioner) to report on the state of the lakes and waterways in the ACT. This direction was issued pursuant to sections 12(1)(b) and 21(1)(a) of *the Commissioner for Sustainability and the Environment Act 1993* (the Act).

The 'State of the Lakes and Waterways in the ACT' investigation report (Report) was delivered to the Minister for the Environment on 31 May 2022 and tabled in the ACT Legislative Assembly on 2 August 2022. The investigation targeted waters within, or that flow through, the ACT's urban area and involved the evaluation of:

- the condition of Canberra's main lakes and waterways;
- the effectiveness of key Government management actions and strategies;
- the ACT Government's monitoring, evaluation, and reporting processes; and
- the role of community and stakeholders in managing water quality and ecological health.

The Report by the Office of the Commissioner for Sustainability and the Environment (OCSE) provides a stocktake of the health of our lakes and waterways, and review of the substantial amount of planning, policy, regulations and program investment that support waterway management. The Report highlights the importance of Canberra's lakes and waterways for community wellbeing and the significant challenges in managing these waterways within an urbanised landscape for multiple values. The Report's key findings relate to water quality, governance, coordination and resourcing.

The original purpose, and therefore design, of Canberra's lakes and ponds were to mitigate flooding and reduce the transmission of pollution and sediment sourced from urbanised catchments; these lakes and ponds are reported as being effective for these purposes. The lakes and waterways are also valued by community for environmental attributes, opportunities for recreation and aesthetics.

The management and protection of the ACT's urban waterbodies is a priority of the ACT Government. In early 2022, the ACT Government released the Canberra Urban Lakes and Ponds Management Plan. This plan illustrates the Government's vision to enrich local communities through the aesthetic, recreational, sporting, tourism, cultural and ecological values of lakes and ponds, and to provide opportunities for people to be involved in their use, care and management. Notwithstanding the existing management activities, the recommendations presented by the Commissioner highlight challenges and points of focus for the future work program.

This response to the Report has been prepared by the Minister for Water, Energy and Emissions Reduction as Minister with primary responsibility for water management in the Territory. However, the nature of the recommendations and responses provided below reflect the shared responsibility of water management activities across multiple Government agencies.

Recommendations from the Report

No.	Recommendations
Recommendation 1	Re-open water relevant recommendations of statutory reports and continue to report against these (ACT Auditor General's 2018 <i>Report on Acceptance of Stormwater Assets</i> ; Office of the Commissioner for Sustainability and the Environment 2012 <i>Report on the State of the Watercourses and Catchments for Lake Burley Griffin</i>).
Recommendation 2	Publish an annual detailed breakdown of how the Water Abstraction Charge revenue is expended.
Recommendation 3	Institute a long-term monitoring and reporting program, to comprehensively assess urban water quality, ecological condition, recreation and aesthetic values, management effectiveness, and the impacts of new suburb developments on water quality.
Recommendation 4	Establish and maintain a single point of truth for water quality in the ACT on a public online platform.
Recommendation 5	Formally recognise the cultural value of water held by the Ngunnawal people and further incorporate Ngunnawal practices into management of urban lakes and waterways.
Recommendation 6	Fund improvement of the performance of water quality control infrastructure.
Recommendation 7	Implement a consolidated management framework for the urban waterways of the ACT.
Recommendation 8	Take responsibility for monitoring and management of water quality in Lake Burley Griffin, in recognition of the fact that the ACT Government is primarily responsible for management of the lake's catchment.
Recommendation 9	Strengthen community participation in water management.
Recommendation 10	Reform the Environmental Protection Authority's (EPA) approach to monitoring, compliance and enforcement relating to urban water conditions to re-focus on its core function of protecting the environment.
Recommendation 11	Ensure that all new water-related policies, plans and strategies are underpinned by future climate change projections for the ACT.
Recommendation 12	Reform the approach to urban planning and future land development to ensure that stormwater management is preventative and proactive rather than remedial and reactive.

ACT Government Response

The OCSE made twelve recommendations, each of which is listed below, followed by the Government's response.

The ACT Government is working to enhance water governance, regulation, planning and delivery through various initiatives aimed at protecting Canberra's unique environment. The ACT Government committed:

- \$4.2 million in the 2022/23 Budget to establish an Office of Water;
- \$722,000 in the 2022/23 Budget to strengthen environmental protections; and
- \$14 million in the 2021/22 Budget Review to further expand ACT Healthy Waterways.

These new initiatives and other activities reported below demonstrate the ACT Government's commitment to supporting efficient, effective and coordinated water management.

The new Office of Water will lead the implementation of priority governance reforms and policy initiatives that address many of the foundational issues reported by the OCSE. The Office of Water will:

- improve the coordination of policy and program delivery through the establishment of an overarching consultative forum;
- improve strategic planning, waterway and catchment management and water sensitive urban design outcomes across our city;
- improve access to and understanding of water information; and
- advance the water interests of the Ngunnawal community.

These initiatives are intended to strengthen the Government's response to climate change, improve waterway health and support sustainable urban development.

Recommendation 1

Re-open water-relevant recommendations of statutory reports and continue to report against these (as identified in Tables 2.1 to 2.4 in section 2.4 and detailed below).

Response

Agreed

The ACT Government welcomes OCSE's evaluation on the effectiveness of the measures implemented, and the identification of areas for further consideration. Evaluation is important for the adaptive management of Canberra's urban environment.

Since the provision of these previous reviews, several activities were conducted across Government in response to the past recommendations. The ACT Government acknowledges the ongoing relevancy of the previous recommendations and the importance of continual work to tangibly improve water quality and water management. Work continues by the Government to address the previous open recommendations.

The Government agrees to re-open the recommendations detailed in section 13.2 and will respond to these in 2022-23 public reporting. The broader recommendations provided in tables 2.1 to 2.4 will be used to inform the review and refresh of the ACT Water Strategy. The Office of Water and Cross-Directorate Committee will strengthen coordination, assurance of program and policy delivery, evaluation and reporting on all relevant water activities associated with the findings reported by the Commissioner.

Recommendation 2

Publish an annual detailed breakdown of how the Water Abstraction Charge revenue is expended.

Response

Agreed in principle

The ACT Government supports transparency in the application of charges for cost recovery and relevant expenditure.

The Water Abstraction Charge is part of the Government's consolidated revenue and not hypothecated. Expenditure of consolidated revenue is set out in the ACT Budget.

The Australian Competition and Consumer Commission (ACCC) has an existing statutory role under the *Water Act 2007* (Cth) to monitor and report annually on regulated water charges. The report includes Government expenditure and revenue for water planning and management activities within the Murray-Darling Basin. Revenue for water planning and management activities within the ACT is collected through the Water Abstraction Charge.

The annual Water Monitoring Report and data analysis is published on the ACCC website (<https://www.accc.gov.au/publications/accc-water-monitoring-report>).

The Office of Water will be delivering a suite of priority reforms to strengthen water governance arrangements within the ACT. Activities to improve accountability and transparency for current funding arrangements are scheduled to be conducted by July 2024.

Recommendation 3

Institute a long-term monitoring and reporting program (in addition to the invaluable information provided by Waterwatch), to comprehensively assess urban water quality, ecological condition, recreation and aesthetic values, management effectiveness, and the impacts of new suburb developments on water quality.

Response

Agreed

The ACT Government monitors the environmental status of Canberra's lakes, ponds and rivers and advises changes in water quality conditions in relation to bacteria, blue-green algae and other potentially hazardous conditions such as flooding. General water quality

parameters are also monitored in the lakes, rivers, and ponds to identify long-term trends. Data on streamflow, in-situ water quality monitoring, waterway condition (AUSRIVAS) and faecal indicator bacteria levels are published on the ACT Government open data portal (<https://www.data.act.gov.au/>).

Upper Murrumbidgee Waterwatch is a catchment health monitoring program that is funded by ACT Government and Icon Water. Upper Murrumbidgee Waterwatch produce a high-quality annual report on the condition of waterways across the ACT and region, with technical support from the ACT Healthy Waterways program. This includes data on water quality, macro-invertebrate diversity and vegetation community condition. In addition, Waterwatch undertakes monitoring of platypus at key locations across the ACT and region. These data are fit-for-purpose for a wide range of monitoring and reporting requirements.

Responsibility for water quality monitoring data is held across multiple government agencies. The ACT Government currently assess urban water quality, ecological condition, management effectiveness and the impacts of new suburban developments through:

- Water quality performance monitoring of four of the ACT Healthy Waterways assets (refer to Appendix A, recommendation 7(c)).
- A land use monitoring program established by ACT Healthy Waterways in 2018 that monitors water quality across a range of land use types, including urban development sites.
- Recreational fisheries monitoring and native fish stocking programs (with associated monitoring of fishery condition), conducted by the Environment, Planning and Sustainable Development Directorate (EPSDD), to assess management effectiveness across the seven large urban lakes in the ACT.
- A Conservation Effectiveness Monitoring Program that synthesises information on conservation effectiveness across the conservation estate of the ACT. A report examining aquatic and riparian condition in the conservation estate is being finalised for publication.
- Monitoring and evaluation of sediment and erosion controls on the Whitlam development by the Suburban Land Agency (SLA).

The Office of Water will deliver a suite of priority governance reforms and new initiatives to strengthen water management arrangements within the ACT. The Office of Water will be conducting a review of arrangements for monitoring, evaluating and reporting on the outcomes of the ACT Water Strategy. The Office of Water will also be working with the relevant agencies to scope a contemporary web-based platform (Water Information Hub) for providing access to water quality information.

Recommendation 4

Establish and maintain a single point of truth for water quality in the ACT on a public online platform. This should:

- **incorporate water quality monitoring data from all currently available sources including ACT Government, the NCA, universities (where accessible) and Waterwatch;**
- **include lake and river closure information, and pollution and blue-green algae reporting; and**
- **provide the location of the recreational water quality report and the reporting framework for the assessment of aquatic ecosystem health and water quality described in Recommendations 28 and 29 in the 2019 ACT State of the Environment Report.**

Response

Agreed

Work is underway within the EPSDD Healthy Waterways program, in partnership with the ACT Government Data Lake initiative, to deliver ‘real time’ access to water monitoring data.

The Office of Water will deliver several new initiatives and governance reforms to strengthen water management arrangements within the ACT. These include strengthening arrangements for managing knowledge and sharing water information with the public; reviewing and updating arrangements for monitoring, evaluating and reporting outcomes of the ACT Water Strategy; and working across Directorates to scope a contemporary web-based platform (Water Information Hub) for improving public access to water information. These initiatives will expand on previous work to establish the Data Lake.

Recommendation 5

Formally recognise the cultural value of water held by the Ngunnawal people and further incorporate Ngunnawal practices into management of urban lakes and waterways.

Response

Agreed

The Report highlights the ACT Government’s positive progress on incorporating the knowledge of Ngunnawal Traditional Custodians into the management of urban lakes and waterways. This work is ongoing in partnership with the Ngunnawal community and remains a high priority for the ACT Government.

The protection of cultural values and uses is supported through the ACT Water Strategy 2014–44, land and catchment management plans and operational guidelines; for example, the Transport Canberra and City Services’ (TCCS) planting guidelines that incorporate traditional plants.

The Dhawura Ngunnawal Caring for Country Committee has been established by EPSDD to provide guidance, direction and advice, and to participate in decisions on the management of Ngunnawal Country. TCCS seeks input from Canberra's Aboriginal and Torres Strait Islander community through a designated liaison officer.

Incorporating cultural land and water management practices into ACT Government activities is also being supported by the employment of Ngunnawal people into identified aboriginal positions. In 2021, EPSDD recruited Ngunnawal people into new positions within the Parks and Conservation Service, Natural Resource Management, Conservation Research and Water Policy. The Dam Inspector role is an identified Aboriginal and Torres Strait Islander position within TCCS.

The Report notes work being conducted by EPSDD that supports this recommendation, including:

- Developing a Cultural Resource Management Plan in response to the 2019 review of the ACT's *Fisheries Act 2000* and subsequent changes to the *ACT Nature Conservation Act 2014*.
- Incorporating cultural values and uses within Nature Park Management Plans, through their periodic reviews. The latest reserve management plan to be updated is the Canberra Nature Park Reserve Management Plan.
- Developing the Ngunnawal Ngadjung Water Initiative – a framework and work program to: strengthen Ngunnawal participation in policy, planning and program delivery; support the integration of cultural values and uses in water management; and support a cultural economy.
- Conducting Aboriginal Waterway Assessments (AWA) to further develop a shared understanding of cultural values and uses of our waterways. Information received through the AWAs will be incorporated into the 2023-24 review of the ACT Environmental Flow Guidelines.

Recommendation 6

Fund improvement of the performance of water quality control infrastructure, including through:

- **maintenance of existing ponds, wetlands and gross pollutant traps**
- **supporting activities for water quality (e.g. expanded street sweeping, appropriate disposal of organic matter and application of fertilisers in public places), and**
- **design and build new water quality control infrastructure in accordance with sub-catchment plans developed as part of Recommendation 7.**

Response

Agreed

Improving the performance of water quality control infrastructure is achieved through community participation and awareness, operations and maintenance, and planning and design of future assets. This recommendation is to be met by the activities outlined below.

EPSDD continues to work in partnership with the ACT's three catchment groups to support community education and participation in the care of water quality control assets. The H2OK and The Leaf Collective initiatives are funded by EPSDD to support community awareness and promote behavioural change to reduce the source of nutrients entering the ACT's lakes and ponds.

In 2020 TCCS doubled its street sweeping capacity and modified the street sweeping program to include all urban and industrial areas. The expanded program has been resourced to include a second sweeping shift, additional operators and the introduction of a weekend overtime program. TCCS is also working to optimise its operations by identifying additional tipping locations for the disposal of organic material.

The maintenance of ponds and some water quality control assets are conducted by TCCS with funding through the Healthy Waterways program and initiative funding. Funding for the ongoing operation and maintenance of 20 previously built water quality assets was supported by the Government in the 2019-20 Budget (Maintaining healthy waterways).

The water quality control assets previously constructed through the Healthy Waterways program are reported as cost effective by the OCSE. The ACT Government has funded the construction of three more assets and a further eleven are in design. This will expand the Territory's infrastructure options for improving stormwater quality. Determining the design and priority placement of new assets is being informed by an evaluation of asset performance and sub-catchment planning in the Lake Tuggeranong, Lake Burley Griffin, Lake Ginninderra and Yerrabi Pond catchments.

Recommendation 7

Implement a consolidated management framework for the urban waterways of the ACT.

This should:

- **take a catchment or sub-catchment approach, explicitly recognising the interconnectedness of urban waterways, ponds and lakes, and their catchments**
- **incorporate and enhance existing management planning and strategy documents, resolving inconsistencies and ensuring that objectives for urban waterway management are clearly defined**
- **involve Ngannawal community in water management planning and practice, and**
- **deal with management of both water flow and water quality.**

Response

Agreed

Sub-catchment plans will be prepared through the Healthy Waterways program in both urban and rural areas of the ACT. Planning will occur initially in the Lake Tuggeranong, Lake Burley Griffin, Lake Ginninderra and Yerrabi Pond urban catchments, and in the Naas-Gudgenby rural catchment.

The catchment plans will identify priority areas for targeting management intervention to improve water quality. The plans will be informed by Government priorities, support the implementation of existing plans/strategies, incorporate new science and be developed with community participation.

The Office of Water will deliver several new initiatives and governance reforms to support this recommendation, including a refresh of the ACT Water Strategy, a review and update of arrangements for monitoring, evaluating and reporting on outcomes of the ACT Water Strategy, and facilitating engagement with the Ngunnawal community to integrate cultural values into water management activities.

The refreshed ACT Water Strategy and sub-catchment planning is intended to support a holistic management framework for water and waterway management within the ACT.

Recommendation 8

Take responsibility for monitoring and management of water quality in Lake Burley Griffin, in recognition of the fact that the ACT Government is primarily responsible for management of the lake's catchment.

Response

Not agreed

The National Capital Authority (NCA) manages Lake Burley Griffin on behalf of the Australian Government and reports on the lake's water quality. Management of the catchment activities that effect water quality outcomes within the Lake are within the existing responsibility of the ACT and New South Wales governments. The ACT's role in managing of the sources of pollution should affect the water quality outcomes within the lake without the need to take on broader responsibilities for the lake environment. Taking on broader responsibilities would have significant financial implications for the ACT Government.

The ACT Government works with the NCA on lake management activities through bilateral working arrangements and through the ACT and Region Catchment Management Coordination Group (legislated under the *Water Resources Act 2007*).

Governance reforms to be delivered by the Office of Water include establishing a process for addressing cross-cutting issues in the water sector, strengthening arrangements for sharing information, and for monitoring, evaluating, and reporting on outcomes from the ACT Water Strategy. A Water Information Hub will be scoped by the Office of Water to

improve reporting on water quality within the ACT. The Office will work with NCA to deliver the governance reforms and new initiatives.

Recommendation 9

Strengthen community participation in water management through measures such as:

- **providing secure, ongoing funding to community groups working on catchment management, water quality testing, ecological surveys and public education and engagement**
- **expanding the use of deliberative democracy, and**
- **establishing a formal mechanism for meaningful community involvement in the governance of the proposed Office of Water.**

Response

Agreed in-principle

Community participation is integral to land and water management activities within the ACT. Funding support is provided by the ACT Government to support community involvement in catchment management, water quality testing, ecological surveys and public education and engagement.

A four-year funding commitment of \$1,678,500 was made by Government in the 2021-22 budget to continue support for the three ACT Catchment Groups. The increased funding supports waterway stewardship, community education on waterway health and engagement in catchment management. The Catchment Groups play a key role in delivering the Frogwatch and Waterwatch programs. The ACT Government has supported the Catchment Groups to deliver the Upper Murrumbidgee Waterwatch program over the past ten years.

The ACT Government H2OK: Keeping Our Waterways Healthy community education and behaviour change program has been running since 2019. This program contributes to reducing the source of nutrients for blue-green algae and related water quality problems.

The Office of Water will provide a new central point of engagement with the ACT community on water policy and planning issues. The focus of community engagement will be on developing shared ownership of the policy goals and working collaboratively with affected stakeholders. For example, EPSDD have recently initiated a co-design process with the Ngunnawal community to develop the Ngunnawal Ngadjung Water Initiative.

Several new initiatives will be implemented by the Office of Water to enhance public access to water information. This will facilitate community participation in the management of the ACT's water resources.

Recommendation 10

Reform the Environmental Protection Authority's (EPA) approach to monitoring, compliance and enforcement relating to urban water conditions to re-focus on its core function of protecting the environment, including that the EPA:

- **is sufficiently empowered and resourced to undertake compliance monitoring and enforcement of all environmental conditions and activities, including around erosion and sediment controls, and**
- **monitor the effectiveness and compliance of water pollution control structures for new developments, including during the construction phase, to reduce stormwater impacts on lakes and rivers.**

Response

Agreed

The EPA's approach to monitoring, compliance and enforcement relating to urban water conditions is focused on its core function of protecting the environment. This includes carrying out crucial functions as a forefront defence to manage the impacts of existing activities within Canberra, protect the environment from the increasing urbanisation and demands on natural resources, and respond to the community, industry and emerging risks. A risk-based approach is applied by the EPA to ensure that its resources are applied to target the highest priority issues.

The environmental protection functions require ongoing commitment to administration, monitoring, compliance and regulation to prevent negative environmental impacts from diffuse sources of pollution as well as waste facilities, sewerage treatment plants and a range of industrial and commercial activities. The EPA will use the Report's finding to inform its risk-based intelligence-led regulatory responses.

The recommendation is to be met through the ongoing commitment by the EPA to the administration, compliance and enforcement of environmental legislation to protect and prevent environmental harm from a broad range of commercial and community activities including the construction sector, waste industry, sewerage treatment plants and community complaints.

The EPA continues to work with EPSDD to improve environmental protection guidelines, including for those matters identified in the Report. Updates to the *Environment Protection Guidelines for Construction and Land Development in the ACT* have recently been published and provided to all Environment Protection Agreement holders. The updated guidelines increase the capacity of sediment controls on construction sites and aim to reduce sediment runoff. These guidelines aim to reduce sediment runoff from building sites, which is a contributor to sediment and nutrient load in our waterways.

In the 2022-23 Budget, funding was committed over two years to support the EPA's compliance, monitoring and regulatory oversight activities and the development of an action plan to achieve reforms necessary to deliver an enhanced and modernised environmental protection framework in the ACT.

Recommendation 11

Ensure that all new water-related policies, plans and strategies are underpinned by future climate change projections for the ACT.

Response

Agreed

Climate change projections are being incorporated into new policy and planning activities of Directorates.

The ACT Government is a partner in the New South Wales and Australian Regional Climate Modelling project (NARClIM). Investment in NARClIM provides climate projections to inform policy, climate adaptation and risk management for the ACT and region.

The climate projections are being considered in the development of plans and policy initiatives. These are underpinned by water quality and quantity models that will increasingly incorporate updated data to improve our understanding of future climate impacts.

TCCS has a substantial stormwater program focused on augmenting the stormwater network to protect against storm damage. The program utilises predictive modelling of climate change to test and determine appropriate stormwater treatments and upgrades.

Additionally, a key policy initiative for the Office of Water will be conducting the mid-term review and refresh of the ACT Water Strategy. The Strategy refresh will incorporate climate change information to ensure that the overarching policy framework supports sustainable water resource development and adaptation to climate risks.

Recommendation 12

Reform the approach to urban planning and future land development to ensure that stormwater management is preventative and proactive rather than remedial and reactive.

Response

Agreed

EPSDD takes a proactive and strategic approach to stormwater management in urban development and planning. However, some circumstances dictate that remedial work may be needed during or following development.

Stormwater management planning for Molonglo greenfield sites is routinely conducted by EPSDD, in collaboration with TCCS and the SLA, where catchment management, flooding and water quality is integral in the urban planning. Planning for future proposed greenfield and infill developments are increasingly adopting new techniques such as GIS application and consider Ngunnawal values in waterways and catchment planning.

The SLA is committed to continually reducing the impact of construction on areas surrounding their developments. SLA developments are subject to a suite of proactive practices to manage stormwater, as well as sediment and erosion control during construction processes. Remedial and responsive management can be necessary to manage the consequences of extreme weather events, for example cleaning out of sediment ponds in response to forecast weather events. A regular evaluation and improvement process is applied to existing measures to ensure their adaptability to new challenges or issues.

The ACT Government has recently reviewed the Environment Protection Guidelines for Construction and Land Development in the ACT. The updated guidelines include increased sediment basin size and requirements when developing controls for storm events. The Guidelines provide conservative approaches to account for more frequent and intense storms associated with climate forecasts.

Additionally, as part of the review and revisions to the planning system, including development of a new Territory Plan, the Water Sensitive Urban Design (WSUD) Code is being updated to be consistent with the new structure of the planning system.