

## Portfolio: Water, Energy and Emissions Reduction

### WATER QUALITY

#### Hot issues

#### Murrumbidgee River (bacterial contamination)

- The bacterial loads within the Murrumbidgee River are symptomatic of land and water management activities upstream of the ACT.
- The poor health of the Murrumbidgee River is a testament to the importance of cross-border collaboration on water management activities and the broader Murray-Darling Basin water reforms.
- The ACT Government remains engaged with the NSW and Australian governments to highlight the risk to human health and water security from upstream water and land management and identify solutions.
- The solutions are complex and require changes to upstream water resource management and improved land management to reduce the source of faecal contamination.

#### General

- Water quality is dependent on the condition of the catchments and levels of nutrient or other pollutants in those catchments.
- The Healthy Waterways Program and water governance reforms are key elements of the Government's strategy to improve the health of our lakes and waterways.
- \$14 million was committed by the ACT Government in April 2022 to expand the Healthy Waterways initiative. This investment will deliver catchment planning and the construction of new water quality assets to target the sources of pollution entering our lakes and ponds.
- The quality of drinking water is managed by Icon Water to Australian standards.

#### Key Information:

#### Lake and Waterways Closures

- As of 25 October 2022, all sites are open for swimming (primary contact recreation) except for Pine Island and Tharwa Bridge on the Murrumbidgee River that is closed due to high bacterial counts (intestinal enterococci).
- Lake and river closure information can change rapidly. For up-to-date information on all waterways, we have an online reporting tool:  
[https://www.cityservices.act.gov.au/news/water\\_quality\\_in\\_our\\_lakes\\_and\\_ponds](https://www.cityservices.act.gov.au/news/water_quality_in_our_lakes_and_ponds)
- The Environmental Protection Authority monitors lake water quality for blue-green algae.

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- For information on Lake Burley Griffin, visit The Swim Guide, press Go to Map and zoom in to the lake. Also see the NCA website for this waterway.

### Blue-green Algae

- Blue-green algae outbreaks occur due to a combination of high temperatures, high nutrient levels and calm weather conditions. These conditions commonly occur in several lakes across the ACT; in particular, in Lake Tuggeranong during the warmer months.
- Blue-green algae blooms are naturally occurring, but urban run-off contributes excessive nutrients to lakes which increases the frequency and duration of algal blooms.

### Bacteria (intestinal Enterocci):

- Bacteria (Enterococci) are indicators of fecal material in the water and the possible presence of disease-causing bacteria, viruses and protozoa.
- Bacteria levels are known to become elevated after rainfall due to run-off from stormwater pipes, grazing land and upstream water bodies.
- The ACT Health Protection Service conducts weekly water testing for bacteria from September to April each year. Tests are performed weekly due to the increased likelihood of primary contact activities during warmer weather.
- City Services may display the 'Area Closed to Primary Contact' sign as a precaution if there has been significant rainfall since water samples were taken. However, bacteria levels may be high after rainfall even if the 'Area Closed to Primary Contact' sign is not displayed.

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## Portfolio: Water, Energy and Emissions Reduction

### HEALTHY WATERWAYS (BASIN PROJECT)

#### Talking points:

##### Hot Issues

##### Belconnen Subsurface Wetland

- Representatives from the Healthy Waterways team have completed extensive consultation with the Belconnen community about the design of the subsurface wetland.
- Four community information sessions were held at the Belconnen Library on 11 and 15 October 2022. Two presentations on the proposal were also given to the Belconnen Community Council in September and October 2022.
- I acknowledge the Belconnen community for their strong engagement and feedback on the proposal
- In general, the Belconnen community are supportive of the proposal but have expressed views for the design to include open water and street furniture.
- The Healthy Waterways team are now reviewing the design with the aim of undertaking further community consultation in late 2022 or early 2023. The Development Application will be lodged after this consultation is completed.

##### General

- Through Stage 2 of the ACT Healthy Waterways program, the Government is continuing to invest in new stormwater infrastructure as a means to help improve the quality of stormwater entering Canberras creeks, lakes, and rivers.
- A Planning Phase report was completed earlier this year that includes designs, feasibility assessments and costings for 13 new water quality assets across the ACT.
- Assets with innovative designs were selected to expand the 'water sensitive urban design' options to help address the ACT's water quality.
- The program of up to 13 new water quality assets is progressing through design acceptance and development approval using funding from the \$14 million budget injection in April 2022. Construction is expected in 2023, subject to the development approvals process and community acceptance.
- Assets that performed best (removed the most pollutant) among those explored within 6 subcatchments were:
  - A subsurface wetland in Belconnen Oval.
  - A floating wetland planned for Yerrabi Pond.

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- Four bioretention swales to replace existing grass swales draining the Kambah Playing Fields, where nutrients were detected as leaking into the adjacent stormwater channel.
  - The naturalisation of three creeks/drains in Calwell, Richardson, and Isabella Plains, which will both clean water and allow it to infiltrate into the groundwater.
  - Three facilities to intercept, clean and re-use stormwater in Kambah (2) and Wanniasa. One of the three will be a reserve site (constructed if one of the priority projects is cancelled).
  - A bioretention swale in Higgins. This applies existing technology in relict green space in a manner that will need to be replicated around the catchment to help treat polluted stormwater.
  - Four small, ‘pocket’ raingardens are being placed in green space within Fadden.
  - Thirty-eight drain outlets, linking small drains to adjacent green space, to help renaturalise our urban catchments.
  - A large raingarden in Kambah what has an associated bioswale. This is a reserve site.
- The four bioretention swales at Kambah Playing Fields have been built and are awaiting initial handover.
  - The floating wetland planned for Yerrabi Pond has (after 11 months) received design acceptance. The wetland is now expected to be fully deployed in November.
  - The remaining assets are in the approvals stage, which is expected to be finalised in 2023.
  - The Leaf Collective social channels and website are being maintained to keep them current and active in advance of another summer campaign targeting household management of leaf fall and grass clippings on suburban street verges.
  - Griffith University is being procured to run the next Leaf Collective campaign, which marks the start of a rollout of the public education program across Canberra. This summer’s campaign will be focused on specific (not yet selected) postcodes in the Lake Tuggeranong and Yerrabi Pond catchments, and possibly in the Lake Burley Griffin catchment. It is expected to run for 10 weeks from 28 January 2023.
  - An evaluation report for last summer’s Leaf Collective campaign found high levels (63 per cent) of awareness of the campaign in targeted postcodes, and that 45 per cent of survey respondents who were aware of the program reported increasing leaf litter collected.
  - A project restoring the rural/conservation catchment of the Naas/Gudgenby River has commenced. A contractor has been procured to conduct river restoration with local landowners. Another procurement is underway to draft a catchment plan for the area.

## Background:

- ACT Healthy Waterways aims to reduce sediment and nutrient pollution of ACT lakes and waterways, and the problems that the pollution causes like algal blooms.
- Stage 1 of ACT Healthy Waterways began in 2014 as a \$94 million joint initiative of the Australian and ACT Governments. It was completed in June 2021. Stage 1:
  - Designed and built 19 large water quality assets—raingardens, ponds, wetlands, and channel restorations—according to water sensitive urban design principles.
  - Carried out a major riparian restoration.
  - Conducted a public education/behavioral change program, known as *H2OK: Keeping our Waterways Healthy*.
  - Performed research into pollution, blue-green algal blooms, and control methods.
- The ACT Government invested a further \$1 million to build a floating wetland in Lake Tuggeranong, to begin planning for the next stage of works, and to extend the research program.
- A total \$20 million has so far been invested in 3 tranches of the PAGA commitment to *Expand Healthy Waterways: \$30 million over 4 years*.

**Portfolio: Water, Energy and Emissions Reduction****QUEANBEYAN SEWAGE TREATMENT PLANT****Talking points:**

- The Queanbeyan-Palerang Regional Council (QPRC) has proposed the construction of a new sewage treatment plant near Oaks Estate, to serve future population needs and address ageing infrastructure.
- The proposal is nearing the end of an Environmental Impact Statement (EIS) process.
- The Conservator was requested to comment on information about the downstream impacts to aquatic ecosystems and water quality in Revised EIS documentation submitted by QPRC, with a response due in early November 2022.
- The Planning and Land Authority will then consider whether the EIS provides sufficient information on the environmental impacts to proceed to Development Assessment.
- The ACT Environment Protection Authority is in discussion with QPRC to review the licence conditions for the Queanbeyan Sewage Treatment Plant (QSTP). These conditions set limits on operational arrangements to minimise water quality impacts.

**Key Information**

- The existing QSTP is estimated to have a design capacity for 34,500 Equivalent Persons (EP) but currently services about 52,000 EP.
- The plant is meeting the existing effluent licence conditions, however, to protect the lake's values would require more stringent discharge conditions that are unlikely to be met by the current infrastructure. The existing plant is also unlikely to continue meeting the existing licence conditions under the projected population growth in Queanbeyan.
- The 2022 *State of the Lakes and Waterways in the ACT* report by the Office of the Commissioner for Sustainability and the Environment recommends review of the Environmental Authorisation (licence to pollute) held by QPRC, to ensure the proposed new treatment process results in water discharge quality that matches best practice for a modern urban sewage treatment plant.
- A 2012 report by the OCSE estimated that continued deterioration in the quality and reliability of Lake Burley Griffin as a sporting venue creates an economic cost to the ACT and region of around \$25 million per annum.
- Water quality within Lake Burley Griffin results in regular closures for primary human contact due to blue-green algae and bacterial levels that exceed human health guidelines.

## Background Information

### Environmental Impact Assessment

- Section 123 of the *Planning and Development Act 2007* identifies assessment of the proposal as Impact Track requiring an Environmental Impact Statement (EIS). Specifically, the proposal includes activities identified in Schedule 4 of the Act which triggers an EIS: “*construction of a sewage treatment plant that will be less than one kilometre from the boundary of a residential block and will be able to treat each day more than 2,500 equivalent persons*”.
- The ACT Conservator raised concerns on a draft EIS in March 2021. Concerns included impacts to aquatic biodiversity and water quality and noted the socio-economic and cultural significance of Lake Burley Griffin.
- A revised EIS was submitted by QPRC in April 2022 to the Planning and Land Authority and again with further revision in October 2022. On each occasion the EIS was subsequently referred to the ACT Conservator for comment on whether the draft EIS adequately addressed previous comments.
- Once the Authority is satisfied, the Minister for Planning and Land Management will need to consider if the EIS provides an acceptable level of information to describe environmental impacts of the development. This step is required prior to allowing the QPRC to apply for development application for the proposed QSTP upgrades.

### Background on development

- The existing QSTP was built in the mid-1930s and is located within the Jerrabomberra district of the ACT. The plant processes sewage from NSW and Oaks Estate (in the ACT) and discharges treated effluent into the Molonglo River.
- A study commissioned in 2011 recommended a major upgrade to the plant, but those upgrades were not carried out. Since 2011, the condition of the QSTP has continued to deteriorate while the local population has increased. This has resulted in exceedance of the design capacity of the plant.

## Portfolio: Water, Energy and Emissions Reduction

### Murray Darling Basin Water Reforms

#### Talking points:

- The Murray-Darling Basin Plan provides a framework to guide the sustainable management of water resources in a way that balances the needs of the environment, communities, and industry.
- Implementing the Basin water reforms is a collaboration between Basin governments. These reforms provide the appropriate scale of management, across State and Territory borders, to respond to our climate emergency and safeguard the long-term security of our water resources.
  - The poor health of the upper Murrumbidgee River is a testament to the importance of cross-border collaboration on water management.
  - We are working with NSW water managers to establish arrangements that protect our native fish populations and avoid future instances, such as in 2019, where the Murrumbidgee River ceased to flow.
- The Australian Government has recently committed to providing approximately \$2.5 million to support the implementation of Murray-Darling Basin water reforms within the ACT during 2021-2024.
- The ACT is also working with the Commonwealth to design bespoke arrangements for the implementation of water efficiency measures. These measures are important for building a water secure city.

#### Key Information

- Priorities for water management reform within the ACT over the 2021-24 period include:
  - contemporising water governance arrangements to support integrated policy and program delivery
  - advancing the water interests of Ngunnawal Traditional Custodians
  - renewing the ACT's policy for 'Non-urban water metering' to ensure that the metering standards promote sustainable water use and meet commitments under the National Water Initiative and Murray-Darling Basin water reforms.
  - climate vulnerability and water security planning to build resilience in the environment and community of the ACT and surrounding region
  - enabling ACT-NSW water trading to support environmental, cultural, and regional economic development
  - facilitating improved community engagement on the Basin Plan implementation and review within the upper Murrumbidgee region

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- delivering water for the environment by returning at least 4.9 gigalitres to the basin through a suite of water efficiency measures.

## Background Information

- The Basin Plan was established in 2012 under the *Water Act 2007* (Cwlth). The key objectives of the Plan (s5.02) are:
  - to give effect to relevant international agreements (environmental) through integrated water management
  - establish a sustainable, long-term adaptive management framework for the Basin water resources
  - optimise social, economic and environmental outcomes in the national interest
  - improve water security for all water users.
- Programs developed to implement the Basin Plan are scheduled to conclude by 2024. This includes measures under the Sustainable Diversion Limit Adjustment Mechanism.
- The Murray-Darling Basin Authority is required to conduct an evaluation of the Basin Plan implementation by 2024 and a review of the Basin Plan by 2026.

## Portfolio: Water, Energy and Emissions Reduction

### 2021 CATCHMENT HEALTH INDICATOR PROGRAM (CHIP) REPORT

#### Talking points:

- A key part of the Waterwatch program is the annual Catchment Health Indicator Program report – known affectionately to most as the CHIP report. This provides a “catchment health score” of river reaches in the Upper Murrumbidgee, displayed in individual report cards, using data collected by Waterwatch volunteers.
- The purpose of the CHIP report is to give the community a better understanding of water quality and waterway health issues in the catchment as well as providing a baseline assessment of catchment health to assist natural resource managers and policy-makers.
- The 2021 CHIP report results are impressive:
  - 96 report cards on various river and wetland reaches across the ACT region;
  - 1,779 water quality surveys, 181 waterbug surveys and 219 riverbank condition assessments; and
  - All collected at 229 sites by over 200 Waterwatch volunteers.
- The results show that:
  - 7 report cards received an Excellent (A);
  - 42 got a Good (B) result;
  - 45 scored a Fair (C); and
  - 2 received a Poor (D) result.
- The news has been overwhelmingly positive for the upper Murrumbidgee catchment with 44 of the 96 report cards showing improvement, 34 remaining steady and only 18 showing a decline. It is heartening to see catchments directly and indirectly impacted by the fires, such as Hospital and Bogong creeks in Namadgi National Park all bounce back this year. Some even receiving Excellent report cards.
- I thank the Waterwatch volunteers for their valuable contribution.

#### Background Information

- Upper Murrumbidgee Waterwatch supports the community in the monitoring and caring of our local waterways. The program has been running for over 25 years and has sites right at the top of the Murrumbidgee River in Kosciusko National Park, all the way down to Taemas Bridge where the Murrumbidgee enters Burrinjuck Dam near Yass.
- Two primary functions of the Waterwatch program are to facilitate community engagement through the monitoring and care of local waterways, and to use the data

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## Portfolio: Water, Energy and Emissions Reduction

### ESTABLISHING A HOLISTIC AND COORDINATED APPROACH TO WATER MANAGEMENT IN THE ACT - OFFICE OF WATER

#### Talking points:

- A new Office of Water is being established to provide a holistic and coordinated approach to water policy, planning and program delivery.
  - Planning for the Office and initial reform activities are underway. A public announcement on the Office's establishment and work plan will occur by the end of this year.
- Strengthening the coordination of water management activities will enable Canberra to become a more climate resilient and water secure city, and to continue to offer residents of the ACT and surrounding region access to healthy rivers and lakes.
- The Office of Water will provide a single point of contact for the community on water management issues and improve the delivery of existing and new policy.
- New initiatives will aim to improve public access to water information and advance the water interests of the Ngunnawal community.

#### Key Information

- The 2022-23 Budget commits to \$1.58 million of additional funding across the next two years to establish the Office, implement reforms to strengthen management arrangements and deliver new initiatives..
- The budget commitment will supplement existing resources drawn from within the EPSDD to support water planning, policy and program delivery.
- The Office of Water will develop new initiatives that aim to:
  - improve public access to water information
  - advance the water interests of the Ngunnawal community
  - provide a long-term plan for securing Canberra's water supply.
- Governance reforms and new initiatives being conducted by the Office provides the basis for the Government's response to the State of the Lakes and Waterways report by the Office of Sustainability and the Environment.

#### Background Information

- The Parliamentary and Governing Agreement for the 10th Australian Capital Territory Legislative Assembly includes the commitment to *consider the best administrative arrangements to manage new water programs and provide a holistic and coordinated approach to water programs and policy.*
- Establishing the Office of Water was informed following a review of current governance arrangements conducted by the Environment, Planning and Sustainable Development Directorate under the Governance Review Project.

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- The core aim of the Office of Water is to help the sector better:
  - clarify (or reset) the vision, objectives and goals for the sector;
  - tackle discrete and more immediate issues and governance reforms such as roles, responsibilities and accountabilities;
  - coordinate on cross-cutting issues, foster collaboration and help reach decisions that reflect a more coordinated, integrated approach;
  - investigate and resolve deeper issues of governance and structure; and
  - communicate with the public on ACT water resource management issues.
  
- The Office will have responsibility to:
  - lead policy and planning for the ACT water sector, including regulatory setting (e.g. setting environmental authorisations for water quality issues);
  - implement the full package of governance reforms in consultation with relevant agencies;
  - undertake monitoring and reporting to government on the implementation of governance reform priorities, water plans, policies and strategies;
  - provide the primary point of engagement with the ACT community on water sector issues; and
  - undertake assurance reviews in line with an annual assurance work program agreed by the Minister for Water.

**Portfolio: Water, Energy and Emissions Reduction****NON-POTABLE WATER PRICING REVIEW****Talking points:**

- Golf clubs continue to receive a 50% discount through the Market Equity Scheme on the non-potable Water Abstraction Charge.
- Further discounts applied during the COVID-19 pandemic have now ceased.
- The government commenced consultation with each Golf Club in October 2022 in response to the pricing review. This gives clubs the opportunity to provide feedback about individual irrigation requirements and water security, current pricing policy and potential policy options in response to the Non-potable Water Review.
- The government remains in contact with the ACT and Monaro District Golf Association as the peak body for the region and will continue to provide updates on the review process.
- Additional feedback will be sought from broader consultation with licensees and stakeholders, which will inform the government Response to the Review and consideration by the government in early 2023.

**Key Information**

- The Review and any proposed changes to water pricing is restricted to non-potable water use only and will not affect potable water charges.
- Proposed policy is intended to support a nuanced approach to the application of charges for water consumption that seeks to balance the trade-off between affordability and promoting water conservation.
- The Review recommends the financial support for clubs under exceptional circumstances. The nature of this financial assistance is being considered as part of a package of policy measures in development.
- The situation with Belconnen Magpies Golf Club is unique because they are reliant on irrigating with treated effluent to supplement non-potable water demand in most years. The supply of treated effluent by Icon Water under private contract requires careful consideration to negotiate an appropriate and equitably costed outcome.

**Background Information**Non-potable Water Review

- The ACT Government committed through the Parliamentary and Governing Agreement to ensure that clubs continue to support the community while reducing harm from gaming.
- A review into water costs for high-intensity club users of non-potable water commenced on 1 March 2021 by ACT Treasury. The aim of the review was to consider

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the impact of water costs on the operation of clubs while not requiring cross-subsidisation by other ACT water users.

- The Review was finalised and published on the *Your Say* website in December 2021.
- The scope of the review was limited to non-potable water only. This includes water sourced from rivers, dams and groundwater sources, recycled water from sewage treatment plants and stormwater from the Inner North Reticulation Network. Treated drinking water (potable water) was not part of the Review.

### National water reforms

- Micro economic reforms related to water pricing have been agreed by successive governments under the National Competition Policy, National Water Initiative (NWI, 2004), Water Act Cth (2007) and the Murray-Darling Basin Plan (2012).
- The ACT is a signatory to inter-governmental agreements that give effect to these water reforms. Specifically, the ACT has agreed to implement water pricing and institutional arrangements that promote economically efficient and sustainable use of water resources, water infrastructure assets, and government resources devoted to the management of water.
- The NWI pricing principles state that recycled water and stormwater should be consistent with pricing policies for potable water, and stimulate efficient water use.
- The pricing principles promotes user-pays and pricing transparency, in respect of water supply systems and cost recovery for water planning and management activities.

### ACT Water Strategy 2014-44 Striking the Balance

- The ACT Water Strategy aims to achieve ‘an integrated and efficient water supply system that provides for the optimal mix of supply options, encourages efficient use of water, is resilient to climate variability, and secures the social, economic and environmental needs of the ACT community’.