



# LEGISLATIVE ASSEMBLY

## FOR THE AUSTRALIAN CAPITAL TERRITORY

### SELECT COMMITTEE ON ESTIMATES 2024-2025

Ms Nicole Lawder MLA (Chair), Ms Suzanne Orr MLA (Deputy Chair),  
Miss Laura Nuttall MLA

### ANSWER TO QUESTION ON NOTICE

Asked By: Ms Nicole Lawder MLA

Addressed to: Minister for Water, Energy and Emissions Reduction

Redirection: N/A

Reference: Water

Hearing Date: 24 July 2024, 10.45am to 12pm

In relation to: Environment, Planning and Sustainable Development Directorate  
and Responsibility for Floating Wetlands

QON lodgement Date: 26 July 2024

Answer Due date: 5 August 2024

- (1) Can you point to any successful initiatives in regard to implementing water harvesting systems, which was a 2018 government recommendation?
- (2) What concrete metrics are you using to measure the effectiveness of the floating wetland installed in Yerrabi Pond in 2023, and how do these results stack up against the goals set in 2018?

**Shane Rattenbury MLA:** The answer to the Member's question is as follows:

- 1) The Inner North Reticulation Network (INRN), which became operational in 2017-18, is the Sullivans Creek component of the Canberra Integrated Urban Waterways Project, which was jointly funded by the Australian and the ACT Governments as part of the Water Smart Australia Program.

The main aim of INRN is to capture stormwater in constructed wetlands and use the harvested stormwater (following treatment), to irrigate urban green spaces such as sporting fields and parks. The other environmental, social, and economic benefits include:

- reduced nutrient loads and algal blooms in Lake Burley Griffin,
- reduced demand on potable drinking water supplies, and

- provision of greater urban green spaces such as sporting fields and parks (especially during droughts).

A recent audit of the INRN operation confirmed that the scheme provides a range of quantifiable positive impacts, most notably in relation to improving water quality in urban waterways, providing social networking, and delivering a positive economic benefit to the community.

Since 2018, the Government installed a stormwater recycling unit at the Kambah Playing fields adjacent to Kett Street in June 2024. It was made operational in July 2024. This unit treats stormwater from the pond at Kambah shops to a potable standard and then pumps it to the water tanks that are used to irrigate the playing fields. The costs of the unit will be offset by savings in potable water charges.

Another recycling unit has been approved to be installed at playing fields at Hyland Place, Wanniasa, and approvals are being sought for a third recycling unit for the playing fields next to Boddington Crescent, Kambah.

At Lennox Gardens Park a pump was installed to replace a potable water irrigation system with lake water irrigation. The recycled lake/stormwater is for irrigating the grass for amenity purposes.

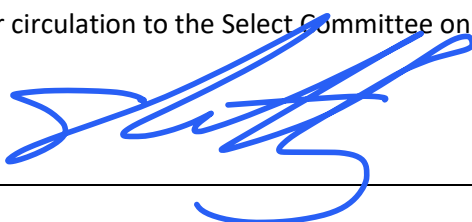
- 2) Plants growing in the Yerrabi Floating Wetland, which remove excess nutrients from the pond, are still being established. The plants will improve water quality through the processes of nutrient uptake, as the plants continue to grow, and denitrification (the removal of nitrates from the water by bacteria that are living on the plant roots).

The effectiveness of the Yerrabi floating wetland will be measured through plant harvest and analysis for their nutrient content. When plants grow on the floating wetlands the only source of nutrients is directly from the water their roots are in.

Continued nutrient uptake requires new growth which is promoted through harvesting and removing old plant biomass from the floating wetland. The performance of the wetland in removing nutrients from the pond is determined by weighing the plant biomass harvested (after it is dried) and the analysis of subsamples to determine the concentration of nutrients in the plant matter. The total dry plant biomass harvested multiplied by the percent concentration of nutrients equals the mass of nutrients exported from the pond by harvesting.

Approved for circulation to the Select Committee on Estimates 2024-2025

Signature:



Date:

6/8/24

By the Minister for Water, Energy and Emissions Reduction, Shane Rattenbury MLA