ACT Government

Suzanne Orr MLA
Minister for Aboriginal and Torres Strait Islander Affairs
Minister for Climate Change, Environment, Energy and Water
Minister for Disability, Carers and Community Services
Minister for Seniors and Veterans

Member for Yerrabi

RESPONSE TO QUESTION ON NOTICE
Questions on Notice Paper No 5
11 April 2025
Question No. 330

MR BRADDOCK MLA - To ask the Minister for Climate Change, Environment, Energy and Water:

1. What are the most common sources of microplastics from the urban environment that pose a threat to the waterways and wildlife of the ACT.
2. Does the ACT Government collect any information on the presence of microplastics in the ACT's waterways; if so, what are the insights regarding the presence of plastics in our urban environment that such information reveals.
3. Does the ACT conduct any chemical testing of our waterways, as distinct from testing of our drinking water supplies, for toxic chemicals and carcinogenic substances that may be derived from degraded plastics; if so, what are the insights regarding the presence of plastics in our urban environment that such testing reveals.

MINISTER ORR MLA - The answer to the Member's question is as follows:

1. Urban stormwater runoff is considered a primary contributor of microplastics to waterways. The most common sources of microplastics are from breakdown of larger plastic items, such as bottles, bags, and packaging materials, and the shedding of small plastic particles from items like plastic building materials, synthetic turf and other textiles such as shade cloth and clothing and personal care products. During washing or rainfall events, these microplastics are picked up and eventually make their way into drains, ponds, lakes, rivers, and or sewer thereby contaminating waterways.

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2. A one-off study was conducted by the ACT Government at Lake Tuggeranong in 2023, which confirmed the presence of microplastics at the inlets to the Lake and in the Lake itself. The concentrations were typical of Australian urban waterways. Most microplastics were in the form of fibres, which may come from shedding of fibrous materials such as synthetic clothing, household furniture, construction materials and fishing lines.

   Recreational water testing assesses microbial quality. The ACT guidelines for recreation water quality are based on the National Health and Medical Research Council's *Guidelines for Managing Risks in Recreational Waters*. Information on water quality monitoring is available at How water quality is monitored - ACT Government.

3. The Environment Protection Authority (EPA) undertakes regular testing of ACT waterways, however the parameters tested do not include microplastics or carcinogenic substances.

Approved for circulation to the Member and incorporation into Hansard.

Suzanne Orr MLA
Minister for Climate Change, Environment, Energy and Water **Date:** 02/05/25

This response required 6hrs 18mins to complete, at an approximate cost of $597.74.

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Minister for Disability, Carers and Community Services
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Member for Yerrabi

RESPONSE TO QUESTION ON NOTICE
Questions on Notice Paper No 8
27 June 2025
Question No. 510

MS CLAY MLA - To ask the Minister for Climate Change, Environment, Energy and Water:

1) How much water was released from Lake Ginninderra in 2025 to achieve desired flows at Ginninderra Falls for Netflix movie filming, with the total broken down by each individual release.
2) After each water release referred to in part (1), what was the water level at Lake Ginninderra.
3) What water level at Lake Ginninderra is optimal for (a) habitat health, (b) water quality, (c) species health and (d) amenity, including smell, recreation and appearance.
4) What water quality monitoring was undertaken at Lake Ginninderra preceding the water releases referred to in part (1).
5) What water quality monitoring has been undertaken at Lake Ginninderra following the water releases referred to in part (1) and what are the results.
6) Has there been any breach of Environmental Protection Authority standards for water quality at Lake Ginninderra in 2025? If so, please provide details of breaches.
7) Has the ACT Government observed a decline in water quality, habitat quality, or any observable impact on lake species following the water releases referred to in part (1).
8) How long did it take for Lake Ginninderra to restore to desired water levels following the water releases referred to in part (1).
9) What is the estimated financial cost of water releases referred to in part (1) undertaken at the request of Netflix.
10) Were any costs or charges associated with the water releases referred to in part (1) charged to Netflix.

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MINISTER ORR MLA - The answer to the Member's question is as follows:

1. The volume of water released from Lake Ginninderra is estimated to be approximately 297 megalitres for the first and 66 megalitres for the second release, respectively.
2. The lake water level was reduced from the full level by 0.31m and 0.36m after the first and second releases, respectively.
3. The ACT Environmental Flow Guidelines (2019) provide guidance that ACT urban lakes should be managed to within 0.6m of their full level to maintain functional assemblages of macrophytes, protect waterbird breeding habitat, maintain healthy ecosystems in terms of biota and maintain populations of native fish in urban impoundments were stocking occurs.
4. Routine water quality monitoring is undertaken as part of the Upper Murrumbidgee Waterwatch program. Waterwatch took one sample from Lake Ginninderra on 19 January 2025.
5. ACT waterwatch undertook one sample on 15 February 2025. Data is as follows:

Parameter	**Value**
Water temperature (degrees C)	23
pH (pH units)	7
Dissolved oxygen (mg/L)	6.5
Phosphorus (mg/L)	0
Nitrate (mg/)	0
Electrical conductivity (µS/cm)	280
Turbidity (NTU)	9

6. The Environment Protection Authority advised that there have been no breaches of water quality standards in Lake Ginninderra during 2025.
7. There have been no observed impacts on water quality, habitat quality or any observable impact on lake species following the water releases.
8. Lake Ginninderra refilled to full level early on 10 February 2025, approximately 4.5 days after the second water release.
9. The only identified costs associated with water releases referred to in part (1) is the time of ACTPS staff involved in facilitating the release of water. Trying to estimate this cost would require considerable resources to calculate due to the efforts required across multiple directorates.
10. No costs or charges associated with the release of water was charged to Netflix.

Approved for circulation to the Member and incorporation into Hansard.

Suzanne Orr MLA
Minister for Climate Change, Environment, Energy and Water **Date:** 28/07/25

This response required 1hrs 18mins to complete, at an approximate cost of $131.67