



Shane Rattenbury MLA

Attorney-General

Minister for Consumer Affairs

Minister for Water, Energy and Emissions Reduction

Minister for Gaming

Member for Kurrajong

#20/23897

RESPONSE TO QUESTION ON NOTICE

Questions on Notice Paper No 03

1 April 2020

Question No. 175

MS LAWDER: To ask the Minister for Water, Energy and Emission Reduction -

- (1) How many days has Lake Tuggeranong been closed as a consequence of poor water quality in (a) 2015, (b) 2016, (c) 2017, (d) 2018, (e) 2019 and (f) 2020.
- (2) What data has been collected for Lake Tuggeranong water quality, for example, levels of blue green algae and other bacteria.
- (3) Can the Minister please provide this data by month for each year of (a) 2015, (b) 2016, (c) 2017, (d) 2018, (e) 2019 and (f) 2020.

MINISTER RATTENBURY: The answer to the Member's question is as follows:

(1)

Lake Tuggeranong has had an advisory status of no primary contact recreation for the following number of days in each year (Table 1).

Table 1. Summary of number of weeks swimming sites on Lake Tuggeranong were advised as no primary contact recreation, 2015 – 2020.

Site	2015	2016	2017	2018	2019	2020
Tuggeranong Town Park (LT3)	9*	16	27	22	21	11
Nguru (LT5)	7*	11	17	14	16	9
Ngadyung (LT7)	7*	14	18	15	14	11

* Data begins from mid-2015

(2)

The management of the urban lakes primary contact recreation (activities such as swimming, diving and bathing) is prescribed in the *ACT Guidelines for Recreational Water Quality* (2014).

<https://www.health.act.gov.au/sites/default/files/2018-09/ACT%20Guidelines%20for%20Recreational%20Water%20Quality.pdf>

Data on bacteria (specifically faecal indicator bacteria, *Enterococcus* spp.) are routinely collected by ACT Health, and data on blue-green algae are collected by Access Canberra, as per the ACT Guidelines for Recreational Water Quality (2014). Based on advice from ACT Health and Access Canberra to TCCS, TCCS provide advisory 'closure' information via their website (https://www.cityservices.act.gov.au/news/news-and-events-items/water_quality_in_our_lakes_and_ponds), and via signage at swimming locations on Lake Tuggeranong. Monitoring of bacteria and blue-green algae by ACT Health and Access Canberra respectively, is undertaken weekly throughout the summer swimming season (October – April).

In addition to the routine water quality monitoring undertaken for bacteria by ACT Health and blue-green algae by Access Canberra, EPSDD also maintain a background surveillance water quality monitoring program for Lake Tuggeranong. This program collects water quality information six to eight times per year to inform the long-term management of Lake Tuggeranong, including data on the phytoplankton community, which is comprised of many groups of aquatic organisms including blue-green algae (called cyanophyta). In addition, EPSDD also supports the Upper Murrumbidgee Waterwatch program. This citizen science program supports volunteers to undertake monthly water quality testing around Lake Tuggeranong and its catchments, as well as undertake bi-annual macroinvertebrate (waterbug) diversity and biennial riparian (streamside) vegetation condition assessments. These data are published in the annual Upper Murrumbidgee Waterwatch CHIP report, released in March each year (<https://www.act.waterwatch.org.au/data/chip-reports>).

(3)

The following data for Lake Tuggeranong is provided as spreadsheets:

- Attachment A: ACT Health faecal indicator bacteria (*Enterococcus* spp.) coliform counts from 2015 – 2020. This data consists of counts of 'coliform forming units/100mL'. Three sites in Lake Tuggeranong are monitored weekly during the swimming season. ACT Health publish much of these data via the ACT open data portal: <https://www.data.act.gov.au/>
- Attachment B: EPSDD phytoplankton community data 2015 – 2020. These data consist of six to eight grab-samples per year from two locations in Lake Tuggeranong. Data consists of cell counts (number of cells/mL) of major taxonomic groups of algae. Blue-green algae species are present in the group 'Cyanophyta'
- Attachment C: Access Canberra blue-green algae species data for Lake Tuggeranong, 2015 – 2020. This data consists of cell counts (cells/mL) and biovolumes (m³/L) for individual genera of algae, sampled at three locations in Lake Tuggeranong.

Approved for circulation to the Member and incorporation into Hansard.

Shane Rattenbury MLA, Minister for Water, Energy and Emissions Reduction Date:.....

This response required 10 hrs 5 minutes to complete, at an approximate cost of \$944.21