

2023

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

TENTH ASSEMBLY

Speech

**Grass Clippings – Impact on ACT Waterways –
Assembly Resolution of 24 November 2022**

**Presented by
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Minister for Water, Energy and Emissions Reduction
September 2023**

Madam Speaker

I rise to speak further to Minister Steel's statement about the government's response to the Assembly's Resolution on grass clippings and their impact on Canberra's waterways.

As the Minister with portfolio responsibility for addressing the challenge of improving Canberra's water quality, it is timely that I update the Assembly on recent insights into the role that grass clippings play in the pollution of waterways. These come from the Government's ongoing investments in the ACT Healthy Waterways program.

Healthy Waterways research underway by the University of Canberra, ANU, CSIRO and several consultants is shedding light on why problems like blue-green algal blooms in Lake Tuggeranong and the excessive growth of water plants in Yerrabi Pond arise.

In summer, Canberra's lakes and ponds are warm, still, sun lit, and nutrient-rich waters, which is perfect for growing water plants and algae.

The one factor that we can control is the level of nutrients in the water.

Phosphorus has been identified as the main nutrient that determines the growth of blue-green algae in Lake Tuggeranong and is likely to be a major factor driving algal blooms in other lakes and ponds. The more phosphorus you have, the more algae you get.

High levels of phosphorus can come from grass clippings in gutters or a range of other sources. However, preliminary research findings suggest that grass clippings in gutters could indeed be a major source of nutrient pollution.

The amount of grass clippings in gutters varies locally. For example, if local measurements are extrapolated out to the Lake Tuggeranong catchment, grass clippings could be contributing between 20 kilograms and as much as 300 kilograms of phosphorus to Lake Tuggeranong per catchment-wide mowing event.

For context, that's between 4 to 60 per cent of the estimated annual supply of phosphorus to the lake via stormwater.

The big range in these figures is what you would expect. Sometimes there is not much grass growing in the verge, or the mowers direct the cut grass away from gutters. At other times and places, there is lush growth of lawns in road verges and unfortunately some of this ends up in gutters when the verges are mown.

The research teams are providing the Government with information that should soon allow us to more accurately estimate the input of nutrients to Canberra's lakes and ponds from grass clippings and identify the other sources of nutrients to these waterbodies.

One of those other sources are leaves. Of course, the mowers don't distinguish between grass and leaves, so if there are leaves that have fallen on the grass they may end up in the gutters as part of the mowing. Leaves may also be blown or be raked into gutters.

Grass and leaf litter doesn't need to be washed into a lake to cause a problem. The research has shown it only takes one to two days for most of the nutrients in grass and leaf litter to leach out into stormwater if the litter is continuously wet. So, grass and leaf litter in gutters can serve as a nutrient source simply when it rains.

And not only are grass and leaves a source of phosphorus in catchments but, once delivered to the lake by the stormwater system, the dissolved forms of phosphorus are much more readily taken up by nuisance algae than other forms.

These research findings are both bad and good news. On the one hand, grass and leaf litter in gutters is likely to be a driver—possibly a major driver—of algal blooms like those seen in Lake Tuggeranong and Lake Burley Griffin. On the other hand, there are ways that grass and leaves can be kept from gutters, which means that we can envisage making big gains in our quest to reduce the frequency and duration of blue-green algal blooms in our urban lakes.

It is not acceptable that stormwaters are being polluted with nutrients. We should have the same expectations of ourselves as we do of our rural communities, who have for decades been asked to ensure that they do not pollute waterways.

It is far harder and more expensive to filter pollutants—especially dissolved pollutants—from stormwater than it is to stop the stormwater from getting polluted in the first place.

Stopping pollution from occurring must be our top priority in our efforts to clean up our lakes and other waterways.

Minister Steel has already spoken about the many steps that the Government is taking to ensure that we manage verges so that grass and leaf litter do not end up in drains.

Through the ACT Healthy Waterways Program, the Office of Water are supporting their colleagues in Transport Canberra and City Services who are

working to find cost-effective ways to manage verges and sports fields to avoid waterways being polluted.

It's not just the Government that manages road verges. It is important for our community to understand the importance of their role in managing their verges and gutters.

As part of the ACT Healthy Waterways Program, the Government has funded the Leaf Collective program. The Leaf Collective aims to ensure that:

- residents and gardening or landscaping businesses are aware of the impact that grass clippings and leaves in gutters are having on waterways; and
- residents have viable options for either composting or disposing of grass and leaf litter, so it is kept from gutters.

So far, the Leaf Collective pilot campaign results have been very encouraging, for example—

- there has been exponential growth in the uptake of the campaign offerings, that is, website traffic, socials followers, leaf-bags ordered, and trees and drains adopted; and
- more organic litter was collected in areas where the pilots ran than in other areas of Canberra.

The Government is aware that many more campaigns will need to be conducted before grass and leaf litter is no longer a major source of water pollution, but we are encouraged by the early results.

Madam Speaker, in summary, the Government, businesses and the broader community all need to play a part in ridding our gutters of leaf and grass litter.

While it may seem like a bit of organic litter in any one gutter is a minor problem, when you factor in the thousands of kilometres of roads in the ACT, there is a very large amount of litter just sitting there waiting for the next rainstorm to pollute the city's stormwaters.

It is difficult and expensive to remove pollutants from stormwater, so it is sensible and necessary, where possible, to stop the pollution from occurring in the first place. Clean gutters look better and will mean that the Government spends less on cleaning out pollutant traps.

Once the avoidable pollution has been dealt with, then the Government will have a chance to solve water quality problems by building new wetlands and other water quality infrastructure.

Improving the quality of the ACT's stormwater, lakes and ponds remains a focus for the Government. This Budget provides a further \$8.2 million to the Healthy Waterways project, taking the total funding provided in this term of Government to \$35 million. This funding will ensure that initiatives like the Leaf Collective and others can begin to solve some of the ACT's most pressing water quality problems.