

FRIENDS OF MAYLANDS LAKES

JUNE 2018

As the end of the financial year approaches, I thought it timely to provide an update on progress over the last twelve months, towards remediation of the Maylands lakes. The works initiated and/or undertaken during this period have been funded primarily by the CoB's **\$404k** allocation for 2017/18 (to be followed by an additional **\$1.25m** in 2018/19). Accordingly, I am pleased to advise:

- Piloting of floating wetlands on the Brickworks Lake has proven successful and the sedges therein are thriving. We now have the confidence to increase the number of these units to sixteen, as (on a per square metre basis) they are more effective in nutrient removal than sedges planted in the shallows. Moreover, the depth, design, rock placement, and contours of the lakes limit the opportunities for planting, whereas floating wetlands can be placed in most locations on the lakes. The distribution of the floating wetlands will be six in Lake Brearley, six in Bungana Lake and two in the Brickworks Lake (in addition to the two that are already in-situ). Installation commenced on 2 June and the contract includes a two-year maintenance period (quarterly inspections).
- The defunct aerator on the Brickworks Lake has been replaced with a more effective fountain, that automatically switches off if the prevailing winds are too strong (to minimise the risk of inhalation of potentially toxin laden mist, by those recreating in the proximity of the Lake). The same wind governed system has also been incorporated into the aerators on Lake Brearley and Bungana Lake.
- A survey of the lakes was recently undertaken, revealing that stratification is occurring in the water column at depths of 1 metre or more, which is to be expected on man-made lakes of this size. This, along with a bathymetric survey, will assist in determining the need for installation of solar powered submersible aerators ('bubblers') and the optimum locations of these, should they be required to circulate/oxygenate the water. Tenders are currently being sought for the bathymetric survey of all three lakes, with a proposed start date of early July.
- Phoslock treatment was applied to the lakes in February this year. As mentioned at the time, the purpose of the treatment is to physically bind or make unavailable to algae, phosphorous from within the water column and sediment which has been transported into the wetland. This product has been well demonstrated to be effective where phosphorous levels are higher than water quality guidelines (another treatment of Phoslock will be applied following the dredging).
- Tenders were sought for gross pollutant traps (GPT's) and the contract was recently awarded for the purchase and installation of two GPT's – one on Lake Brearley and the other on Bungana Lake, at a total cost of \$94k. These will remove 20% of the nutrients from the water entering the lakes via those drains. It is envisaged that a secondary GPT will in future, be installed in train with each of these initial units. The secondary traps will remove 37% of the nutrients remaining in the water following primary filtering. Additionally, litter traps will be piloted shortly, in twelve of the stormwater gullies surrounding the lakes. These will capture larger material and organic matter, preventing it from entering the lakes. There is still a need however, to adopt water sensitive urban design principles throughout the stormwater system flowing into the lakes.

- Weeding of the vegetation in the drainage stream (Peninsula Rd – Brickworks Lake) is to be undertaken by the CoB in June 2018. The weeds will be replaced by appropriate native plants later this year (spring). FOML volunteers will likely have the opportunity of being involved in the planting phase of this project.
- Sedges were planted by the CoB in late February, on the sandbar in Bungana Lake, near the junction of Kittyhawk View and Dakota Ave. More are to be planted in selected areas of all three lakes in spring.
- Tenders are to be invited in July 2018 for the dredging of the lakes, with a view to commencing this work as early as possible. On completion of the dredging, another Phoslock treatment will be applied to lock up any remaining phosphorous.
- In addition to the \$404K from the CoB, the FOML was successful in its application for a \$7k 'Stronger Communities Program' grant from the Commonwealth Government. This will be supplemented by the CoB and will enable the removal of the Casuarina trees, as well as subsequent revegetation of the Lake Brearley foreshore, adjacent to the gazebo on Hinkler Loop. The project will commence in spring 2018. It too, should be an opportunity for planting work by volunteers.

Progress with other initiatives in the locale which do not directly affect the health of the lakes is:

- Sturdy stainless-steel grates have been designed to prevent turtles entering the drains around the lakes. A contract has now been let for the production of these and installation is to commence in June 2018.
- A draft fox control strategy has been developed, which focuses on the Swan River and Lightning Swamp. \$15k has been placed on the 2018/19 draft budget, for the implementation of this initiative.
- The ornate, but somewhat derelict park benches around the lake are being

refurbished.

- More 'dogs on lead' signs have been painted on the walk/cycle paths on the perimeters of the lakes.
- Negotiations are imminent between the FOML and the CoB regarding repair and reinstatement of the timber jetties and other structures around the Maylands lakes. Hopefully this will result in an ongoing planned maintenance program.
- The FOML responded to an invitation from the State Heritage Office to submit its views on the development/restoration of the Brickworks, essentially supporting the initiative, but opposing any compensatory development on land between the Maylands Golf Course and the Maylands lakes.

While the aforementioned works have had negligible impact to date, they have laid the foundation for phase two of the program, (to commence this calendar year) which is expected to yield a noticeable improvement in the health of the Lakes. For this we offer once again, our sincere thanks to the CoB for its commitment to the remediation program. It is a privilege to work alongside the councillors and particularly the officers. Their professionalism and dedication to reviving our lakes has proven invaluable. Thank you too for your ongoing support, without which the remediation program would never have got underway or had any chance of success.

Please don't hesitate to contact me if you have any questions or wish for additional information. In the meantime, the FOML will continue our best endeavours on your behalf, in collaboration with the CoB, other relevant organisations and the broader Maylands community, towards reinstating the lakes to their original health.

Geoff Trott
Chairman
Friends of Maylands Lakes