

7 February 2017

Essential Services Commission  
Level 37 / 2 Lonsdale Street  
Melbourne VIC 3000

[water@esc.vic.gov.au](mailto:water@esc.vic.gov.au)

Re: Melbourne Water's Quiet Lakes Bore Flushing Tariff Proposal

To Whom It May Concern:

I am writing in response to Melbourne Water's Quiet Lakes (QL) Bore Flushing Tariff Proposal dated November 2016 (MWQLBFTP) to charge Patterson Lakes Quiet Lakes households an annual fee to fund "annual costs of additional groundwater flushing of the lakes" and to express my concerns on this matter.

This proposal relates to the issues of the funding and the ongoing management responsibilities of Melbourne Water's Quiet Lakes assets, as outlined in the 2013 Patterson Lakes Independent Review – Management of Patterson Lakes Tidal Waterways and Quiet Lakes (PLIR), including the running of the bore to manage the Quiet Lakes' water quality.

I ask the Essential Services Commission (ESC) to read the PLIR in order to understand the design, history and assets management issues of the Quiet Lakes.

#### **WATER QUALITY:**

The heart of this matter is one of a health-hazard risk for residents, flora, fauna and the wider environment (ie: Kananook Creek, Eel Race Drain, Patterson River and Port Phillip Bay).

There is documented evidence of multiple outbreaks of toxic blue-green algal (BGA) blooms, a health hazard, occurring in the Quiet Lakes, even as recently as January 2017.

In this proposal, Melbourne Water (MW) is being misleading by stating residents "wanted a higher standard of water quality with the lakes in order to undertake other activities such as swimming..." (MWQLBFTP page 1)

Melbourne Water would like the ESC to believe the proposal's issue is that residents want primary-contact-quality water for recreational purposes. What we want is water that is NOT a health hazard and for MW, as the responsible water authority, to comply with PLIR Recommendation #3 of implementing Design Flow's recommendations of the running of the bore in order to provide residents with water quality standards of secondary-contact-quality water, **as a minimum**. The PLIR specifically states:

- *Recommendation #2: That minimum water quality standards in the Quiet Lakes and Tidal Waterways is maintained to comply with secondary contact criteria as defined*

under the ANZECC Guidelines and SEPP – Waters of Victoria as amended from time to time.

- **Recommendation #6:** That the system of the interconnecting water flows between the three Quiet Lakes be managed, funded and operated by Melbourne Water to deliver the outcomes recommended in this Review. **These are to be funded from the Melbourne Metropolitan Waterways and Drainage Charge.**
- **Conclusion #9:** The goal should be to maintain water quality to secondary contact standard **as a minimum** and warnings posted when quality falls below this standard or when algal blooms are a health hazard.
- **Recommendation #3:** That the recommendations of the Design Flow 'Quiet Lakes Water Quality Management Plan' be implemented, following the completion and an assessment of the bore water trial.

A higher standard of water quality would be primary-contact-quality water. MW is proposing residents pay for bore flushing for primary-contact-quality water despite it knowing, as evidenced by the following PLIR conclusions, that achieving primary-contact-quality water is not viable. I question MW's motives for wanting to charge this additional tariff to residents of whom many are retired and some on the age pension.

- **Conclusion #8:** Maintaining water quality for primary contact purposes (including swimming) in waterways and lakes in urban areas cannot be guaranteed.
- **5.5 Conclusions and Recommendations:** The review concludes that secondary contact is reasonable and a practical standard at this advanced stage of the Patterson Lakes evolution. Permanently achieving primary contact standard in the Quiet Lakes is not a viable scenario, with or without any additional special charge or tariff. (PLIR page 74)

The ESC should note the following statements made by Melbourne Water:

- On page 3 of the latest Bore Flushing Tariff Proposal, MW states:  
"increased water quality monitoring over summer from fortnightly to weekly."  
This has not occurred.
- On page 2, MW of the Proposal states:  
"In recognition of the unique circumstances of the lakes, Melbourne water has agreed to fund additional services through the Waterways and Drainage Charge that exceed the outcomes anticipated in the Independent Review...."

MW may have received funding through the Waterways and Drainage Charge for water quality monitoring, but it has not been providing increased water quality monitoring. Lake Carramar residents had to call the EPA in January 2017 about a blue-green algal bloom in Lake Carramar. Either MW didn't test the water quality and discover the BGA bloom or it tested the water quality and ignored the problem.

#### **PUBLIC DRAINAGE FUNCTION & QUIET LAKES CLASSIFICATION:**

In order for the ESC to better understand the QL predicament, the following is related

information. The PLIR states:

*The Quiet Lakes comprise three landlocked lakes; Lake Legana, Lake Illawong and Lake Carramar which are connected to each other and to the Patterson River and Kananook Creek via pumps and drains. (PLIR page vi)*

It should be noted that both the Patterson River and Kananook Creek drain into Port Phillip Bay.

The PLIR clearly establishes the Quiet Lakes are public drains. Not only do area streets drain into QL, but also adjoining public recreational facilities such as the Peninsula Link Trail (cycling and walking trail) drains into the Quiet Lakes (see figure 1 in appendix). As a result, the Quiet Lakes provide a public flood mitigation benefit. The PLIR states the following:

- *Conclusion #4: The Quiet Lakes and Tidal Waterways are reserved for drainage and recreational functions.*
- *Conclusion #5: Any intention in the 1973 Agreement to designate the Patterson Lakes Waterways as a private reservation was displaced by their subsequent reservation in the subdivision plans and their design and construction as public drains.*
- *Conclusion #7: The Quiet Lakes have a public drainage function.*
- *The Quiet Lakes were designed such that stormwater would primarily fill each lake, and that a system of interconnecting pipes and outflows would balance the water levels in each lake. This would ensure that the inter-flows of water were sufficient to maintain appropriate retention times in each water body. Retention periods (hydraulic residence times) relate to the primary anaerobic treatment function of the water body. Expressed simply, too short a period does not allow natural treatment processes to occur, and too long a period can create stagnancy and algal blooms. (PLIR page 62-63)*

On page 7 of the MWQLBFTP, MW states

*"The Quiet Lakes are private assets, accessible only to the residents whose properties adjoin the individual lakes"*

This is not true. The PLIR rejected this argument and provided the following clarification:

*"Furthermore, the Review is not aware of any statutory basis for creating a "private" reserve through the subdivision process. There is nothing in the relevant legislation that would support the creation of such a reserve. If the intention was not to reserve the lakes and waterways for a public purpose, then the land should have been privately owned and not set aside in the subdivision as a "Reserve for Drainage and recreational Purposes". (PLIR page 50)*

#### **ISSUE OF ACCESSIBILITY:**

On page 4 of MW's Bore Flushing Tariff Proposal, it states the Quiet Lakes "...were essentially private access with regard to recreation."

This is not accurate. The Lake Illawong Model Boat Club is open to public members living

outside of the Quiet Lakes. Its members enjoy sailing model boats on the lake as a recreational activity. Lake Illawong is also used by Patterson Lakes Primary School students for fishing as a sports activity. Students living outside of Patterson Lakes attend Patterson Lakes Primary School, too. There are also nearby households without direct access to the Quiet Lakes, which have “key access” to the Quiet Lakes. Key Access is via the Melbourne Water access gate.

### **FUNDING RESPONSIBILITY:**

Furthermore, The PLIR identifies MW as being financially responsible for the SYSTEM of interconnecting water flows between lakes.

- *Recommendation #6: That the system of the interconnecting water flows between the three Quiet Lakes be managed, funded and operated by Melbourne Water to deliver the outcomes recommended in this Review. These are to be funded from the Melbourne Metropolitan Waterways and Drainage Charge.*
- *Recommendation #3: That the recommendations of the Design Flow Quiet Lakes Water Quality Management Plan be implemented, following the completion and an assessment of the bore water trial.*

Following the 3-year bore trial, Design Flow determined that during the period of October through March, 1.5ML/day of bore water is needed to manage safe levels of Blue Green Algae in the Quiet Lakes.

### **LAKE CARRAMAR:**

The Patterson Lakes Independent Review found

- *“The recommended through-flow of water volumes need to reach all three lakes, not just Lake Legana. Flows are being diverted from Lake Illawong to the Wadsley Drain, not allowing adequate flushing flows to enter Lake Carramar.” (PLIR page 71)*
- *“Melbourne Water should undertake an immediate review of the headworks infrastructure...and rectify this issue.” (PLIR page 71)*

Recommendation #4 of the PLIR states

*“Adequate through flows in Lake Carramar are to be guaranteed by Melbourne Water.”*  
Melbourne Water has omitted Lake Carramar from the QL Bore Flushing Tariff Proposal.

The original Quiet Lakes design was one of THREE interconnected lakes with water flowing between the three lakes. Melbourne Water has not yet accomplished the aforementioned recommendations of the PLIR of guaranteeing adequate through flows into Lake Carramar. Furthermore, as evidenced by the January 2017 blue-green algal bloom in Lake Carramar, MW is not providing, at a minimum, secondary-quality water or higher.

It is **unacceptable** to attempt to address the problems in two of the three lakes. Lake Carramar residents, like those of the Lake Legana and Lake Illawong, are entitled for water in their lake to be, at a minimum, of second-contact quality or higher.

It is clear that MW is not currently providing a higher service for the three Quiet Lakes. They

are not even providing the minimum service. MW should not be seeking approval from the ESC as they are not providing a higher-level service.

It should be noted MW tops up some remote parts of Patterson Lakes Tidal Waterways (PLIR page 63). Yet, MW wants to charge an extra tariff to Lake Illawong and Lake Legana residents, whilst totally ignoring Lake Carramar residents. Is Melbourne Water purposely trying to create a stagnant body of water in Lake Carramar, highly susceptible to blue-green algae?

### **BALLOT AND BORE FLUSHING TARIFF PROPOSAL INFORMATION:**

The 2015 ballot on bore flushing and related Melbourne Water information about the ballot issues were misleading. The December 2015 MW Quiet Lakes Ballot on Bore Flushing--Report on Final Results--shows a deceptive view of the results. The ESC should note that residents felt strong-armed by MW to vote "yes". Our choice was to vote "yes" to run the bore or "no" and the bore would not be run.

Conclusions and recommendations of the PLIR, Design Flow Water Quality Management Plan, etc, indicate a need for bore flushing in the QL to manage safe levels of Blue Green Algae by managing stagnant water and maintaining water quality.

The running of the bore to flush water through the QL to prevent BGA outbreaks is a **health issue** not a lifestyle choice of wanting primary-contact-quality water for the pleasure of swimming. Residents understand the close proximity of QL homes to the beach and lakes' waters pose a real health hazard if water quality is not maintained to a minimum secondary-contact quality. It is reprehensible, for Melbourne Water as the responsible water authority, to offer an option, which would result in a water quality problem hazardous to human health. Even worse, that the wider community and environment is at risk when BGA-tainted water drains out of the Quiet Lakes. Bore flushing is needed to prevent the risk of BGA.

Of particular concern in MW's Bore Flushing Tariff Proposal are the planned actions MW would take in the event of *"multiple prolonged blue green algae blooms were to occur within a single summer in Lake Legana or Lake Illawong, Melbourne Water will conduct a review into the benefit bore flushing is providing on controlling blue green algae...Following the outcome of the review, a decision will be made to either continue running the bore if there appears to be a benefit, or to cease if there appears to be no benefit."*

The three-year bore trial has already proven bore flushes effectively improves water quality and reduces BGA blooms. If the Quiet Lakes are experiencing prolonged BGA blooms and the bore is turned off, the BGA blooms will simply proliferate. Surely, another alternative of increasing the volume of water flushing through the QL from the bore, which there is scope to do under the current bore licence, would be a better alternative to simply stopping the running of the bore. Cessation of bore water flushing through Quiet Lakes should **NEVER** be an option. The bore trial results proves bore flushing is effective for the QL.

Furthermore, MW's Tariff Proposal does not include any plans to re-start the bore after it has stopped it. In other words, Melbourne Water could potentially cease the running of the bore with plans to never run it again.

Inclusion in this Tariff of this planned action of ceasing the bore, without consultation with QL residents, seems to be an attempt by MW to avoid any future consultation for QL residents and for MW to have a free hand in doing as they wish. It is important for key stakeholders, the residents, to have due process should MW want to stop running the bore.



## **CUSTOMER CONSULTATION FOR THE BALLOT AND RE-SUBMISSION TO THE ESC:**

Furthermore, the Essential Services Commission should note that in November and December 2015 Melbourne Water did a letter box drop to all Lake Legana and Lake Illawong residents with the Bore Flushing Tariff Proposal ballot and the results of the ballot. In August 2016, Melbourne Water again did a letter box drop providing the ESC's tariff proposal decision.

However in September 2016, Melbourne Water did NOT carry out a letter box drop regarding their re-submission of the QL Bore Flushing Tariff Proposal. MW placed a single notice on each of the Lake Illawong and Lake Legana notice boards. A notice was given to the Lake Illawong Retirement Village to place on its notice board.

There are a significant number of elderly residents on these two lakes, some in their 80's and 90's, who live in homes not located in the Illawong Retirement Village. Some of the elderly residents suffer major health problems and are unable to walk to the lake notice boards. Considering a new tariff may be detrimental to the finances of elderly stakeholders, all residents should have received notification of this current re-submission via a letter box drop. Interestingly in January 2017, MW conducted a letter box drop with a notice about planned carp removal activities. Adequate consultation of affected residents by Melbourne Water about its resubmission of the Bore Flushing Tariff proposal has not occurred.

## **CONCLUSION:**

In conclusion, the Patterson Lakes Independent Review clearly acknowledges the role of the Quiet Lakes, as a public drainage system. Its functions benefit the wider community. Quiet Lakes residents should not be held financially responsible for Melbourne-Water-owned assets (ie: Lake Legana, Lake Illawong and Lake Carramar, which provide a public benefit to the wider community, including those located downstream of the Quiet Lakes.)

The three-year bore trial clearly provides evidence that running the bore effectively improves water quality with a result of decreased occurrences of blue-green algae. Melbourne Water needs to finally accept the evidence of the bore trial.

I oppose Melbourne Water's proposal for the Quiet Lakes Bore Flushing Tariff. It is concerning the lengths and deceptive misconceptions Melbourne Water, the responsible water authority, will use to bully residents, many elderly, into accepting its proposals. It is ludicrous Melbourne Water try to pick and choose which responsibilities from the PLIR it wants to fulfil. MW may not want to be responsible for Quiet Lakes, but it is and, as such, has a duty of care as the responsible water authority to solve hazardous water problems, such as blue-green algae, and to implement solutions to rectify the problems.

I ask the Essential Services Commission to speak with the Minister for Water to ensure Melbourne Water meets its obligations and comply with the Patterson Lakes Independent Review to provide all of the Quiet Lakes with safe water.

I ask the Essential Services Commission to instruct Melbourne to do the following:

1. To re-instate weekly blue-green algae testing as a "normal service" as approved by the ESC in 2014
2. To reject this Quiet Lakes Bore Flushing Tariff proposal and instruct Melbourne Water to fund the cost of running of the bore, as recommended by Design Flow's

three-year bore trial findings and the PLIR, through the Melbourne Metropolitan Waterways and Drainage Charge in order to improve the quality of water in the Quiet Lakes to ensure a minimum of secondary-contact-quality water or higher.

3. In the event of "prolonged" blue-green algal blooms, to instruct Melbourne Water to increase the volume of bore water flushed through the Quiet Lakes and consult with the QL residents before any steps are taken to turn off the bore. I also asked the ESC to instruct a plan of action to be created and implemented in the event MW does cease running the bore. It is imperative QL residents have an opportunity to be consulted on this plan of action and have input.

I thank you for your time in dealing with this matter.

Sincerely,

Nancy Grant

Appendix:



Figure 1: Peninsula Link Trail cycling and walking path highlighted by yellow line – obtained from google maps on 9/2/17