

**The key points to my objection to the ESC's Draft decision are:**

**THE REASON FOR RUNNING THE BORE**

The ESC Draft decision reports Melbourne Water's reason for running the bore is "to reflect residents' request for a higher level of water quality than it is required to deliver as part of its responsibility for managing recreational waterways" (ESC, p.5)

In my role as Kingston Council's South Ward Councillor, I have been closely involved in working with the Quiet Lakes residents during the past 4½ years to ensure the bore continues to run to overcome the hazardous levels of Blue Green Algae (BGA) that were being experienced on all three lakes prior to the commencement of the bore trials.

From my close involvement with the Quiet Lakes BGA issues, I can say with authority that the reason for running the bore is to reflect resident's requests of the Hon. Peter Walsh, former Water Minister for Melbourne Water to re-instate the ground water licence to commence running of the bore to manage safe levels of Blue Green Algae to meet Melbourne Water's core responsibility to improve waterway health and to protect human health in this public drainage reserve.

The Independent Review determined that due to the public drainage function of the Quiet Lakes and the associated benefits healthy water provides not only those at the Quiet Lakes but also those downstream that Independent Review determined for Melbourne Water to operate the bore to manage, fund and operate the system of interconnecting flows between the three Quiet Lakes to maintain safe secondary contact water quality.

Whilst the ESC may be unclear as to the success of the bore in managing safe levels of Blue Green Algae, it is documented that Design Flow, Melbourne Water and the Quiet Lakes residents of Lakes Legana and Illawong all consider the flow and water renewal created by the bore to be successful in managing safe levels of Blue Green Algae. If still unclear, the ESC should be convinced by 5 continuous summers of safe levels of Blue Green Algae in Lakes Legana and Illawong receiving flow from the bore as compared to 5 continuous years of TOXIC Blue Green Algae persistently evident in Lake Carramar over the same period.

The ESC's Draft decision to believe that Melbourne Water is responding to residents request to operate the bore to achieve water quality 'over and above' secondary contact is factually incorrect. Due to the extreme opposition by Melbourne Water against running the bore to manage safe levels of Blue Green Algae, in desperation to protect their health the residents secured a meeting with the Hon. Peter Walsh, former Water Minister who consequently ordered for the increased ground water licence to be re-instated and the use of the bore to be evaluated.

**UNSAFE LEVELS OF BLUE GREEN ALGAE (BGA) AND ITS ASSOCIATION WITH MAINTAINING SECONDARY CONTACT WATER QUALITY**

- that responsibility for protecting human health should never be placed with the community. That Authorities such as Melbourne Water, DELWP, The EPA, The Health Department and

the ESC exist to ensure the health and safety of the people is protected by following guidelines such as the NHMRC Guidelines.

- all information distributed by MW to residents (warning signs and community information bulletins), referenced in the NHMRC Guidelines (pages 17; p.18 table 1.1; p.20 table 1.2 vs p.21 table 1.3; p.91; p.103 & p.114) and information referenced in the Blue Green Algae Circular (Overview, Coordination Framework and Waterways included p.1) that documents advise of the irritative, allergenic and respiratory health concerns associated with contact exposure to unsafe levels of Blue Green Algae, whilst participating in secondary contact activities of boating and fishing.

As conveyed by Melbourne Water's warning signs and community information bulletins, without ambiguity, when BGA exceeds 4mm<sup>3</sup>/L for toxic BGA or exceeds 10mm<sup>3</sup>/L for non-toxic BGA the water in that moment no longer meets the NHMRC Guidelines and no longer remains suitable or safe for secondary contact activities such as boating and fishing that Melbourne Water has actually agreed to maintain.

The NHMRC Guidelines that I have been instructed to follow by the ESC in relation to the ESC Draft Decision state:

“The primary aim of the NHMRC Guidelines is for the protection of health” (NHMRC p.11)

“They are to be used to ensure that recreational environments are managed as safely as possible” (NHMRC p.11)

“They differ from previous Guidelines in that they advocate a preventive approach to the management of recreational water” (NHMRC p..12)

“The existence of a guideline value does not imply that the environmental quality should be allowed to degrade to this level. Indeed, a continuous effort should be made to ensure that recreational water environments are of the highest attainable quality. (NHMRC p.23)

“When a guideline value is not achieved, this should be the signal to: determine whether measures should be put in place to prevent or reduce exposure under similar conditions in the future” (NHMRC p.23)

“Many of the hazards associated with recreational water use may occur over very short periods (e.g. injuries and infection following exposure to microorganisms). This means that the short-term deviations above guideline values and conditions are important to health, and measures should be in place to ensure and demonstrate that recreational water environments are continuously safe during periods of actual or potential use. In practice this may be difficult to achieve, in which case, appropriate warnings should be issued.” (NHMRC p.23)

The Independent Review states that “achieving secondary contact standard in all the Patterson Lakes Waterways is a reasonable and practical aspiration, and residents and the general public should depend upon a ‘duty of care’ being exercised by all the relevant Authorities”. (Independent Review – Conclusion 5.5, p.74)

This includes not only Melbourne Water fulfilling its core values to improve waterway health and protect human health but also includes the ESC in its role to ensure the Melbourne Metropolitan Waterway and Drainage Charge (MMWDC) funds are sufficient for Melbourne Water to achieve its core values.

The ESC's Draft decision to approve a special charge on the Quiet Lakes residents for running the bore to improve waterway health and protect human health in one of Melbourne Water's public regional drainage reserves proposes to charge those residents twice as they already pay for this service under the MMWDC.

The ESC's Draft decision to approve a special charge is not only inconsistent with the findings of the Independent Review but is also inconsistent with the ESC's role to ensure the MMWDC funds are sufficient for Melbourne Water to achieve its core values of improving waterway health and protecting human health in its waterways.

### **BENEFICIAL USE OF WATER QUALITY**

The ESC Draft Decision states that the Quiet Lakes residents are the primary beneficiary of water quality without any qualification as to how the ESC came to that conclusion.

The ESC also advises that Melbourne Water has agreed to the findings of the Independent Review and that ESC decisions for Patterson Lakes Waterways are to be consistent with the findings of the Independent Review.

The Independent Review states:

“The water quality of Patterson Lakes Waterways affects those who live there, use them, and those downstream abutting drainage and watercourse areas (via outflows). This includes not only human activity but also flora and fauna species and broader ecosystems.” (Independent Review – Water Quality 5.3, p.64)

“The practical function that the Quiet Lakes and Tidal Waterways play in the regional drainage network is not insignificant. The review concludes from the literature and submissions that Melbourne Water operates the drainage system components of Patterson Lakes to a broader catchment, and that this is consistent with the Authority's metropolitan waterways role” (Independent Review – Conclusion 5.5, p.74)

“Whilst the pipeline and pumping system operation does directly benefit the water quality in the Patterson Lakes, it also provides benefit to the Patterson River, Kananook Creek, and Port Phillip Bay water health and associated recreational uses” (Independent Review – Conclusion 5.5, p.74)

“The review concludes that Melbourne Water should manage, operate and maintain these functions from the Melbourne Metropolitan Waterways and Drainage Charge funds.” (Independent Review – Conclusion 5.5, p.74)

The ESC's Draft decision has no basis for assigning the Quiet Lakes residents as being the 'primary beneficiary' of water quality. As the Quiet Lakes residents are not identified by the Independent Review as being the 'sole beneficiary' of Water Quality in the Quiet Lakes the ESC's 'user pays'

methodology cannot allow a special tariff to be assigned to a single group amongst the many benefitting groups of water quality that have been identified by the Independent Review.

The ESC's Draft decision to approve a special tariff to run the bore to manage safe levels of BGA on the basis of an unqualified and inappropriate classification of 'primary beneficiary' is inconsistent with its former pricing decision to reject Melbourne Water's proposal to charge the Marina for the cost and ongoing maintenance of the Tidal Gates as the sole beneficiary when benefit is also received by the 900 other households within the Tidal Waterways system.

## **WATER QUALITY TESTING**

The ESC Draft decision has incorrectly approved a reduction in water quality testing reneging on its previously approved weekly testing and cell counting (ESC Final Decision 2014). The ESC has incorrectly approved a downgrading of water quality testing to weekly visual monitoring for 16 week period over December to March falsely claiming that Melbourne Water is meeting its obligation under the NHMRC Guidelines.

In Melbourne Water's submission to the ESC on 19th Dec 2013 Melbourne Water proposed the following, which was accepted by the ESC:

"Melbourne Water proposed that until the Commission rules on the price submission the existing precept rate would cease and **services would continue to be provided as normal**. Customers would also still pay the general waterways and drainage charge. The Commission accepted this proposal" (MW's ESC 2013 pricing submission, Background p.3)

"Melbourne Water accepts the findings of the Independent Review Recommendations. Adoption of the key recommendations has lead Melbourne Water to develop the Patterson Lakes management strategy, consisting of:....."

-For all other services considered to have a **regional and community benefit**, these will continue to be **funded through the Waterways & Drainage Charge**.

These services and capital works in the Tidal Waterways include: .....

**In the Quiet Lakes**, these include:

- carp removal
- **water quality testing**
- general civil assets monitoring & works
- community communications/consultations

(MW's ESC 2013 pricing submission, Proposal p.4)

The Independent Review states:

"Melbourne Water commissions weekly water quality testing, to ascertain the conditions for recreational use, and any warnings that need to be disseminated regarding algal blooms" (Independent Review – Water Quality 5.3, p.68)

The ESC's Draft decision to approve a reduction in water quality testing is inconsistent with the ESC's former approved decision issued in May 2014 on the basis of Melbourne Water unambiguous submission that "services would continue to be provided as normal" and that "water quality testing provided a regional and community benefit".

#### **MEETING THE NHMRC GUIDELINES FOR WATER QUALITY TESTING**

The NHMRC Guidelines Table 6.6. on page 112 detail that BGA testing should be as follows:

##### **Surveillance mode level – Green level**

-weekly sampling in waterways where known toxic species are present (  $< 0.4\text{mm}^3/\text{L}$  ) (i.e. Carramar); and

-fortnightly where non-toxic species are known to be present (  $< 0.4\text{mm}^3/\text{L}$  ) (i.e. Legana and Illawong)

-fortnightly visual inspections of water for surface scums

##### **Alert (increasing presence - cause for concern) – Amber level**

-twice weekly sampling where toxic species are dominant (  $< 0.4\text{mm}^3/\text{L} - < 4.0\text{mm}^3/\text{L}$  ) (i.e. Carramar); and

-weekly or fortnightly sampling where non-toxic species are known to be present (  $< 0.4\text{mm}^3/\text{L} - < 10.0\text{mm}^3/\text{L}$  ) (i.e. Legana and Illawong)

-make regular visual inspections of water for surface scums

##### **Action Mode (hazardous) – Red Level**

-twice weekly sampling where toxic species are dominant (  $> 4.0\text{mm}^3/\text{L}$  ); and

-weekly or fortnightly where non-toxic species are known to be present (  $> 10.0\text{mm}^3/\text{L}$  )

-make regular visual inspections of water for surface scums.

(NHMRC Guidelines Table 6.6. on page 112)

The ESC Draft decision has approved Melbourne Water's proposal for weekly monitoring over summer, which ignores the NHMRC Guidelines requirement for the Authority to conduct sampling and cell counts at various frequencies depending on the measure bio volume.

Melbourne Water's proposal to only conduct visual monitoring is clearly NOT meeting the NHMRC Guidelines that firstly call for sampling and cell counts in a waterway that is known to contain Blue Green Algae in order to protect Human Health from the adverse health effects of exposure to high cell densities.

The ESC's Draft decision to approve a reduction in water quality testing is inconsistent with the NHMRC Guidelines and consequently the ESC's Draft decision is inconsistent with the findings of the Independent Review.

I recommend that the ESC review its Draft Decision utilising the factual information contained within the relevant guiding documents that have been identified by the ESC i.e. the Independent Review and the NHMRC Guidelines. As a duty of care and as part of its responsibility, Melbourne Water should run the bore and conduct testing but it should do so at its own cost.

Regards,

Tamsin Bearsley

South Ward Councillor

for City of Kingston