

DRAFT

SUBMISSION FROM AUCKLAND COUNCIL

TO THE

MINISTRY FOR THE ENVIRONMENT

**CLEAN WATER CONSULTATION 2017**

25 April 2017

This is the Auckland Council's submission on central government's '*Clean Water Consultation 2017*' of February 2017.

Councillors considered this submission at the Environment and Community Committee meeting held on 4 April 2017. Under resolution, approval of the final submission was delegated to Councillor Penny Hulse, Chair of the Environment and Community Committee.

Please direct any enquiries to Craig McIlroy, General Manager Healthy Waters – phone 021 984 505 or email [craig.mcilroy@aucklandcouncil.govt.nz](mailto:craig.mcilroy@aucklandcouncil.govt.nz).

Auckland Council is the unitary authority for Auckland, a region containing a third of New Zealand's population. Auckland Council is responsible, under the Resource Management Act 1991 (RMA), for managing the region's freshwater resources.

Auckland Council's decision-making is carried out by a governing body, which considers regional matters and is made up of the mayor and 20 councillors, and 21 Local Boards made up of 149 members who consider local community matters. All Local Boards were provided a brief opportunity to provide their views on the Clean Water Consultation 2017 prior to this submission being considered and approved by the council's Environment and Community Committee. Local Board comments received as formal input are appended to this submission. The views of Watercare and Auckland Transport staff were also briefly canvassed when preparing this submission.

Auckland Council also provided its iwi/hapu contacts an opportunity to provide their thoughts for consideration in preparation of this submission.

## **Auckland context**

Auckland sustains a wide variety of freshwater environments including rivers, lakes, wetlands and groundwater. Auckland also contains a third of New Zealand's population. It is predominantly rural, with rural land uses accounting for a significant proportion of the land area and Auckland faces many of the same water management issues relating to rural areas and land uses as other regions.

Nevertheless, the freshwater management issues facing Auckland in large part relate to urban areas and populations, and many of our urban freshwater bodies are significantly degraded. As the population of Auckland continues to grow and land use intensifies, freshwater management becomes even more critical. The scale of Auckland's urban growth presents a huge challenge. Auckland is projected to need 400,000 new dwellings by 2040 to accommodate an additional million people. Maintaining freshwater quality and improving it where it is degraded, while accommodating the required urban expansion is a significant challenge. Key urban freshwater management issues in Auckland are:

- Contaminants from impervious surfaces and urban activities including: land uses, certain building materials, industrial and trade activities – heavy metals, increased temperature and chemical contaminants are a significant concern.
- Contaminants from the combined stormwater / waste water system – areas in older parts of the Auckland urban area have a combined sewer system. These systems were designed to overflow in wet weather events. There are significant costs in replacing these essential infrastructure assets which have a design life of about 100 years. There are current proposals to address these overflows in some areas (eg. the central interceptor).

- Changes in hydrology resulting from impervious surfaces – reductions in stream base flow due to less infiltration, greater runoff volumes and peaks, and “flashier” (faster and more short lived) runoff from rainfall events. These have major impacts on ecosystem health and in-stream erosion.
- Loss of streams and riparian margins resulting from the piping of streams to accommodate urban growth.

In recognition of the need to better manage our water resources, Auckland Council has established the Wai Ora Healthy Waterways programme to ensure the regions waterways are well managed and enhanced. The programme is focused on delivering key water outcomes and additionally provides the mechanism for NPS-FM implementation.

## **Clean Water Consultation 2017**

This submission responds to the Clean Water Consultation by commenting on each of the main components.

### **Ministers Target - ‘90% of rivers and lakes swimmable by 2040’ and supporting this target ‘Better information on water quality for swimming’**

Auckland Council supports the Minister’s new swimmability target (90% of rivers and lakes swimmable by 2040) to reflect that New Zealanders value our large rivers and lakes for swimming. The Minister’s target is that 90% of rivers and lakes nationally will be swimmable by 2040. For large lakes and rivers this means that councils will have less flexibility in terms of the timeframes for water quality improvement outcomes than the previously outlined NPS-FM programme.

However, within the Auckland region, the majority of Aucklanders use our beaches for swimming, and Auckland Council is putting considerable effort into managing swimmability in these coastal waters. Auckland Council’s on-going investment in coastal waters is clearly related to the community’s recognition and use of these priority swimming areas. Auckland Council’s main focus and highest priority will continue to be managing water quality for swimming at these beaches and the estuarine interface between fresh and coastal waters. Council staff are also developing a programme to manage water quality at our highly valued freshwater swimming sites.

Auckland Council supports the use of the four *E.coli* metrics as outlined in the swimming categories table (not detailed in Clean Water Consultation 2017 document, but separately noted on the MfE website) to assess swimmability for this new target, (namely % exceedance of the 540 *E.coli*/100 mL, median *E. coli*/100 mL, 95th percentile *E.coli*/100 mL and % exceedance of the 260 *E. coli*/100mL). This enables councils to provide a clearer picture about the nature of *E. coli* exceedances for any particular monitored river reach, in terms of the percentage of time it is safe to swim, and therefore categorising health risk.

At present, it is unclear as to the approach that should be taken if one or more of the four metrics does not align with the same swimming category (attribute state), in this instance does the lowest colour category prevail as the swimmability outcome? Further clarity is required.

The Minister clarified (on 2 March 2017) that the national swimmability model will be used to track regional council progress towards the 80 and 90% improvement targets over time.

It is not clear how this will be assessed if, for example, councils:

- add additional monitoring sites;
- have land use changes in their region which affect model inputs.

Auckland Council notes that councils are not required to report *E. coli* in lakes for this target, such that people are not able to make an assessment of the public health risk they face swimming in such waters based on the current swimmability maps.

## Better information on water quality for swimming – in large lakes and rivers

The MfE online mapping tool show data for rivers – River Environment Classification (REC) order 4 and 40 cm deep, and REC order 5 and above, and those lakes with a perimeter >1.5 kms.

### *Swimmability maps for Auckland do not identify high risk areas for swimming*

The national swimmability maps were modelled using four variables (climate, land cover, slope and elevation) to predict *E. coli* concentrations in rivers and cyanobacterial biovolume in lakes. Council State of the Environment (SoE) monitoring data was used to calibrate/validate the model and additional 'manual adjustments' were made to tweak outputs based on reality (actual data or observations). This SoE monitoring is predominantly conducted at base streamflow conditions and therefore underestimates the risk to human health under increased flow conditions, i.e. following periods of significant rainfall. This increased risk following periods of heavy rainfall needs to be consistently communicated to the public at large by Auckland Council in relation to the public's expectations of swimmability based on the maps presented by MfE.

Improvements in *E. coli* data from bathing sites is arguably a more appropriate measure to monitor councils 'clean up' action to reduce *E. coli* concentrations over time.

Auckland Council does not agree that controlled sites used for sewage treatment (Rosedale oxidation pond number 2), or sites with significant tidal influence and covered with mangroves (Luke Street, Otahuhu, adjacent to State Highway One) should be included as sites for assessing freshwater swimmability. Accordingly, the inclusion of several identified sites for lakes and some lower reaches of rivers within the Auckland region should be revisited with a view to their removal.

**Complete list of modelled sites to be checked for relevance to swimmability and detailed here.**

While the swimmability maps may be useful to report on swimmability at a national level, they do not accurately identify locations suitable for swimming or actual health risks for these rivers and lakes. More relevant recreational water quality data can be found on council websites and on the 'Land, Air, Water Aotearoa' website (LAWA).

## **Amending the NPS-FM 2014**

### *1. Swimming and recreational values*

Auckland Council notes that all reference to secondary contact for recreation has been removed as it related to the *E.coli* attribute, in favour of contact with freshwater involving immersion.

The revised National Objective Framework (NOF) attribute table for *E. coli* (Appendix 2 of NPS-FM) is now simplified down to one metric (the percentage of exceedances above the 540 *E. coli* /100mL threshold). However, the Minister clarified on 2 March 2017 that all four *E. coli* metrics should be taken into account when assessing swimmability in freshwater. While these other three metrics (median *E. coli*, 95th percentile *E. coli* and percentage of exceedances above the 260 *E. coli* /100mL threshold) are displayed on the MfE website in the swimmability table, they should also be included in the proposed *E. coli* attribute table in the NOF. We require clarification on this point from MfE.

Our interpretation of the policy intent is that while the community can expect large lakes and rivers, and other freshwater bodies valued by the community, to be fit for swimming, there is still a degree of discretion as it relates to the level of improvement for smaller rivers and lakes. This is a key point for freshwater management in the Auckland region as we have predominantly smaller order streams.

The intent of Policy A5 is unclear in the revised NPS-FM; is this the mechanism for councils to deliver the details relating to large lakes and rivers in relation to the Minister's swimmability target via the actions, objectives and timeframes. Auckland Council does not agree that the Auckland Unitary Plan Operative in Part is the appropriate mechanism for this type of national reporting.

Regardless of whether all four categories are included in the proposed attribute table for *E. coli*, guidance is needed to assist councils in the use and interpretation of the four categories together at a given site. For example, how is an attribute state (A, B, C, D) assigned if a site scores a B for one *E. coli* category, but a C for the other three?

The proposed monitoring methods detailed in Appendix 5 are consistent with the MfE & MoH (2003) guidelines for recreational waters. This will significantly increase the commitment to monitor freshwater sites across the country. Can MfE provide clarity around whether SoE monthly monitored sites must now include weekly monitoring over the bathing season (in the Auckland region November to March) each year as per Policy CB1 and Appendix 5. Further, the additional 'out of season' monitoring required in Appendix 5 would require significant resourcing from council. Is the intent of this additional monitoring to make locations swimmable for the entire year as opposed to the current status quo of only being swimmable during the defined bathing season?

## ***2. Monitoring macroinvertebrates***

Auckland Council supports the use of the Macroinvertebrate Community Index (MCI) as an indicator of water quality as part of Council's overall assessment of ecosystem health. The Council is generally supportive of its use as a monitoring tool (Policy CB1). However, it is important to acknowledge that restrictions set on land use practises cannot be directly linked to MCI scores.

## ***3. Maintain or improve overall water quality***

Auckland Council supports the broad intent of focussing action to maintain or improve overall water quality in each Freshwater Management Unit rather than across the administrative region for a council.

#### *4. Managing nitrogen and phosphorus*

Auckland Council notes the proposed amendment to establish objectives for dissolved inorganic nitrogen and dissolved reactive phosphorus for managing periphyton where appropriate (i.e. hard bottomed streams). Auckland Council notes that the majority of the rivers in the Auckland region are soft bottomed, and the management of periphyton is not the prevailing freshwater issue for the Auckland region.

#### *5. Economic well-being*

Auckland Council notes the intent of the proposed amendment, where councils will need to consider economic well-being and economic opportunities when making particular decisions around freshwater quality and quantity.

Auckland Council seeks further clarification regarding the definition and context of 'economic well-being' in the proposed NPS-FM wording. Under Objective A2 - the phrasing "then providing for economic well-being, including economic opportunities" is used at the end of the paragraph. Whereas, under Objective B1 - the phrasing "while providing for economic well-being" is used. This suggests economic well-being has different weighting when deciding on aspects of freshwater quality and quantity allocation.

Auckland Council notes that in some circumstances the community may view the economic well-being and economic opportunities of water in excess of other non-economic values. The affordability (economics of water) of action to maintain or improve water quality can have an impact on the ambition and pace (time period) in achieving improvements.

#### *6. The effect of national bottom lines on infrastructure*

The proposal clarifies that councils, when considering the effects of significant operational infrastructure on water quality, can only set freshwater objectives below national bottom lines for attributes that are currently below national bottom lines and only in the physical area where the infrastructure contributes to the degraded water quality, and only if it is reasonably necessary for the continued operation of the infrastructure. The proposal further limits this exemption to significant infrastructure that was operational as at 1 August 2014. The basis for this date is not set out, and a later date might be more appropriate to anticipate the implications of this change.

Auckland Council does not envisage that this proposal will result in significant consequences to the operation of significant infrastructure of value to the region and the population reliance on it.

#### *7. Coastal lakes and lagoons*

Auckland Council supports the clarification of the policy intent as it relates to the monitoring requirements for nitrogen, phosphorus, and phytoplankton in coastal lakes and lagoons that intermittently open to the sea.

As noted in the Council's response to the 'Next Steps for Freshwater' consultation document, the extent of intermittently closing and opening lakes or lagoons in the Auckland region is limited. The largest coastal lakes and lagoons are located on the west coast of Auckland. Auckland Council is working with the community to improve the water quality at Karekare, Piha, North Piha and Te Henga coastal lagoons.

#### *8. Te Mana o Te Wai*

Auckland Council supports the further clarification of the definition of Te Mana o Te Wai as provided in this document.

Further, it also supports the incorporation of Te Reo Māori and Māori perspectives into the names and descriptions of the national values which give effect to the NPS-FM. Auckland Council will continue its engagement with mana whenua in the Auckland region to further elucidate how these values are best expressed in a regional context.

## **Funding to improve freshwater**

### *General observations*

Auckland Council supports the Freshwater Improvement Fund being made available. The Fund has moved on from a historic focus of retiring rural land. Auckland Council supports the eligibility funding criteria which are broader in application, with a focus on what water outcomes can be achieved, rather than having a focus on particular tools in a particular land use type. Depending on catchment land use make-up, Auckland Council might seek application of such funds to the most appropriate 'clean up' actions, eg. improved on-site wastewater management, reticulation, wildfowl or dog-waste management.

## **Keeping stock out of our waterways**

Auckland Council supports reducing stock access to waterways, lakes and wetlands as a means to restore and enhance water quality, however there are differences between the approach set out in the Clean Water Consultation and the Operative (in part) Auckland Unitary Plan (AUP).

An initial implementation date of July 2017 is overly ambitious, and should be deferred by six months to one year to ensure that the regulations can be made with proper regard to new regulatory powers for promulgation, due process and public notification.

The rules in the AUP differ from the Clean Water Consultation in a number of ways, the key differences being:

- the AUP does not apply a criteria of land type (plains, undulating/rolling land, steep land;
- the AUP provisions apply to intermittent as well as permanent streams, and are not restricted to streams that are 1 metre wide;
- the AUP differs in the timing and application of rules; and
- the AUP uses a stocking rate approach, rather than relating provisions to specific species. This is seen as more directly tied to the effects of stock, and potentially requires a wider range of animals be excluded i.e. poultry, horses, goats and sheep;
- No provision as it relates to stock river crossing requirements as proposed in the stock exclusion regulations.

Auckland Council will review the respective approaches to stock exclusion, to ensure they are complimentary.

The draft regulatory impact statement for stock exclusion, signed off on 1 December 2016, makes reference to the status of stock exclusion policies and rules for each council. The

table notes that policies and rules are 'proposed' for the Auckland region, but this draft document is not up to date. As noted, the AUP is now operative as it relates to stock exclusion provisions.

## **Future Work Programme**

Auckland Council notes the central government future work programme and makes the following general observations.

Freshwater allocation is a significant issue for the Auckland region, in terms of the nature and extent of consents issued for a diversity of purpose. Involvement of Councils and Council Controlled Organisations will be essential if any recommendations are to be grounded in an operational context. This will require adequate time being set aside for this involvement, and/or engagement.

Auckland Council supports the adoption of good management practices, arising from adequate investigation and trialling to ensure that the water outcome sought is achieved within practical and efficient means. Further, the application of scientific and innovative solutions to complex problems will require a degree of flexibility in working towards durable solutions. Auckland Council would strongly encourage MfE and MBIE to convey the current and forward work programme of the National Science Challenge, as its applicability to NPS-FM implementation by councils, including the relevant tools, could be better communicated.

Auckland Council observes that various interests and MfE officials are focused on the design of effective collaborative processes, when the more appropriate question might be what type of engagement might be deemed necessary or appropriate for the context, and the water outcomes sought. Collaboration for collaboration sake may not necessarily result in better water outcomes, nor is it always effective or efficient. A mixed engagement model, applied in a more agile way, may be better for the circumstances and the people involved across the spectrum.

**Local Board input received on 'Clean Water Consultation', Consultation Document'**

**xxxx Local Board Input**

DRAFT