



SUBMISSION ON:

Waikato Regional Council – Te Kaunihera ā Rohe o Waikato

Proposed Waikato Regional Plan Change 1 – Waikato and Waipā River Catchments

Te Panonitanga 1 | Te Mahere Ā-Rohe a Waikato e Marohitia Nei - Ngā Riu o Ngā Awa o Waikato me Waipā

March 2017

1. Acknowledgement

- 1.1 Population Health, Waikato District Health Board (DHB) congratulates the Waikato Regional Council on the partnership arrangements and consultative processes with a diverse range of sectors and communities that has been undertaken in the Healthy Rivers/Wai Ora project and the subsequent development of a Plan for the Waikato and Waipā River catchments.
- 1.2 Thank you for the opportunity to submit comments on the Proposed Waikato Regional Plan Change 1 – Waikato and Waipā River Catchments.

2 Submission

- 2.1 Population Health Waikato DHB supports the proposed Plan Change 1 in principle as the aim is to improve water quality in the Waikato and Waipā catchment areas, the two major waterways in the Waikato DHB Area. However we are opposed to some aspects of the Plan Change, as detailed later in this submission.
- 2.2 Population Health agrees with the focus of this plan change, being the restoration of water quality within the Waikato River so that it is safe for people to swim in and take food from over its entire length. Both of these activities can have a significant positive impact on the health of communities where there is good water quality.

- 2.3 We are concerned with the long time frame of 80 years to reach the desired outcomes that will result in healthy waterways and improve the health of people throughout the Waikato and Waipā catchment areas. Implementing policies that support more sustainable land use earlier may allow achievement of targets in a shorter time frame.
- 2.4 We note that some of the proposed policies outlined in 3.11.3 seek to maintain rather than decrease current levels of discharge from land use practices. We question whether these proposed policies will have the desired outcome of improving the water quality of these waterways. In addition, we submit that the timeframes provided to put into practice the proposed policy changes are too long. For example, stock exclusion from waterways has a long lead in time where in some situations completion will not be required until 2026. There is potential for this timeframe to lead to further water degradation prior to any improvement. While we recognise that land owners will require some time to undertake this activity, delays will make it more difficult to achieve the desired outcome of waterways that are safe for people to swim in and take food from over their entire length.
- 2.5 For the purposes of this submission our attention will focus on microbial pathogens and in particular *E. coli* levels. The bacterium *E. coli* is used to indicate the presence of faeces, and therefore an increased risk of water-borne infection in recreational fresh water (including rivers and lakes) (Ministry of Health, 2009, p.78¹). Individual human exposure to contaminated fresh water (indicated by high levels of *E. coli*) can cause adverse health effects, including digestive and respiratory diseases (Ministry for the Environment and Ministry of Health 2003²).
- 2.6 The proposed Waikato Regional Plan Change 1 aims to reach a maximum 95th percentile *E. coli* level of 540/100 mL in the Waikato and Waipā catchment areas in 80 years' time. We submit that this level is too high, and is not the appropriate level to represent safe swimming. A 95th percentile *E. coli* level of 540/100mL represents a probability of *Campylobacter* infection of approximately 5 in 100 people exposed.
- 2.7 We advocate that the plan change aim to reach a maximum 95th percentile *E. coli* level of 260/100mL. This level relates to an average probability of one case of *Campylobacter* infection in every 100 exposures, five times lower than that proposed (Ministry for the Environment and Ministry of Health 2003³). A surveillance level of *E.coli* of 260/100mL is classified as acceptable for swimming by the "Microbiological Water Quality Guidelines for Marine and Freshwater recreational Areas". These guidelines were developed by the Ministry for the Environment and Ministry of Health, and are the most appropriate guidelines to define when it is safe to swim, from a microbiological perspective.

¹ Ministry of Health. 2009. *Environmental Health Indicators for New Zealand 2008*. Wellington: Ministry of Health.

² Ministry for the Environment and Ministry of Health. 2003. *Microbiological Water Quality Guidelines for Marine and Freshwater Recreational Areas*. Wellington: Ministry for the Environment and Ministry of Health.

³ Ibid.

3 Hearing

3.1 Population Health, Waikato DHB does not wish to be heard in support of this submission.

4 About Population Health, Waikato District Health Board

4.1 Population Health provides public health services, including health assessment and surveillance, public health capacity development, health improvement advisory services, and health protection and preventative interventions to people within the Waikato District Health Board (DHB) area.

4.2 The primary goal of Population Health is to promote, improve and protect health with a focus on achieving equity for people living in the Waikato DHB area. This aligns with the strategic outcomes for the Waikato DHB:

- To improve the health of its population
- To reduce or eliminate health inequalities between segments of the population.

4.3 Population Health has a strong focus and emphasis on the determinants of health or more simply, the factors that have the greatest influence on health. Opportunities for health begin long before the need for medical care, and starts where we live, learn, work, and play.

4.4 The Waikato District Health Board (Waikato DHB) serves a population of 394,340 (2015/2016)⁴ people within 10 territorial authorities and two regional councils, stretching from the northern tip of Coromandel Peninsula to south of National Park and from Raglan and Awakino in the west to Waihi in the east. Approximately 60 percent of the Waikato DHB population of lives outside the main urban areas.

5 Contact address

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⁴ Waikato District Health Board, 2016. Healthy People Excellent Care: Waikato District Health Board Strategy. www.waikatodhb.health.nz/strategy