

Item 5 –

Context and key drivers for the Healthy Rivers/Wai Ora project

This document includes the legislative context and the other key drivers for the project.

Context and key drivers for Healthy Rivers: Plan for Change/Wai Ora: He Rautaki Whakapaipai

The four key drivers for this project are:

- *legal requirements to meet outcomes required by central government and co-management legislation*
- *water quality monitoring results*
- *policy effectiveness reviews*
- *stakeholder and community expectations.*

1. Legal requirements

- Waikato Regional Council is the agency with statutory responsibility under the Resource Management Act 1991 for managing freshwater resources (including water quality and abstraction).
- The Government's *National Policy Statement for Freshwater Management 2011* requires regional councils to manage water quality by setting objectives, limits and targets for all water bodies.
- The *Vision and Strategy for the Waikato River/Te Ture Whaimana o Te Awa o Waikato*, the primary direction setting document for the Waikato and Waipa rivers, reflects community aspirations and expectations and must be 'given effect to' by regional and district plans within the rivers' catchments. The Vision and Strategy applies to the rivers and to activities in the rivers' catchments, and focuses on restoring and protecting the health and wellbeing of the rivers for current and future generations.

2. Water quality monitoring results

N.B. The points below reflect Waikato Regional Council's interpretation of its water quality monitoring data.

- Nitrogen levels in both rivers have been slowly but steadily rising over the last 20 plus years, and will continue to rise if nothing is done. Nitrogen in groundwater can take decades to emerge into surface water, and this indicator of water quality will probably worsen before it improves.
- Sediment levels in the lower reaches of both rivers are high, and have risen over the last 20 plus years.
- Bacteria levels are high in the Waipa, and moderate from below Karapiro to the mouth of the Waikato River. From 2008 to 2012 85% of Waipa River and 84% of

lower Waikato River water samples were unsatisfactory for swimming (based on bacteria and sediment levels for the five sites on each stretch).

- Tackling these issues now will prevent them becoming more difficult and costly to address in the future.
- The rivers sustain the wellbeing of communities and form part of the identity of many of the region's people. River iwi have a spiritual and cultural relationship with the rivers; their health, wellbeing and sense of identity is linked to the rivers.
- In the Waikato River, biochemical oxygen demand and dissolved colour have improved due to improvements in industrial discharges, such as those from dairy factories and meat works, and sewage plants. Chlorophyll a contamination has also decreased. Dissolved oxygen concentrations are mostly excellent, and levels of toxicants such as ammonia, heavy metals and pesticides are low.

Contaminant/s	Trends/ levels	Why a problem	Sources
nitrogen	rising trend in both rivers over the last 20 plus years	<p>Over fertilise aquatic plants, can lead to excessive plant growth, algal blooms and depletion of dissolved oxygen, affecting fish and other aquatic life</p> <p>Should the current trend continue, it's expected the Waikato River will have:</p> <ul style="list-style-type: none"> • more algae • a greater risk of toxic blue-green algal blooms, potentially affecting recreation stock watering and municipal water supplies • reduced clarity, from algae (and sediment). 	<p>Rising trend due to land use changes and intensification</p> <p>Mainly non-point sources, a small amount from point sources</p> <p>Much of the overall nitrogen load comes from farmland, particularly from urine excreted onto paddocks.</p> <p>Municipal sewage and industrial discharges are already regulated and are minor sources.</p> <p>Urban stormwater is already regulated and considered to be a minor source.</p>
phosphorus	<p>Waipa: moderate levels, trends vary along the river, but rising in most downstream site</p> <p>Waikato: moderate but mostly stable levels</p>	<p>reduced clarity, from algae (and sediment).</p>	<p>Much of the overall phosphorus load comes from:</p> <ul style="list-style-type: none"> • soil washed off agricultural land • run off containing dissolved phosphorus • farm animal dung. <p>Municipal sewage and industrial discharges are already regulated and are minor sources.</p> <p>Urban stormwater is already regulated and considered to be a minor source.</p>

Contaminant/s	Trends/ levels	Why a problem	Sources
sediment	<p>Waipa: high but stable levels</p> <p>Waikato: high levels in the lower Waikato</p>	<p>Murky water, which is less safe and attractive for recreation and affects fish and other aquatic life</p> <p>Should high levels of sediment continue, it is expected that the Waikato River's clarity will not improve, and the Waipa will remain brown and murky.</p>	<p>Landslides and streambank erosion are the main sources for the Waipa.</p> <p>Two thirds of the sediment in the lower Waikato comes from the Waipa.</p> <p>Municipal sewage, urban stormwater and industrial discharges are already regulated and considered to be minor sources.</p> <p>Koi carp mainly stir up sediment already present in stream beds and banks by 'sucking' for food sources. As a pest, control of koi carp is through the Regional Pest Management Strategy.</p>
bacteria	<p>Waipa: high but stable levels</p> <p>Waikato: moderate levels from below Kar piro to the mouth</p>	<p>Human health risk, can cause minor illnesses such as ear infections and diarrhoea</p>	<p>Comes from dung of:</p> <ul style="list-style-type: none"> • farm animals • animals living in the bush e.g. pigs, goats • birds e.g. ducks, swans <p>In the Waipa, farm animal dung is the likely dominant source.</p> <p>Municipal sewage, urban stormwater and septic tank and industrial discharges are already regulated and considered to be minor sources.</p>

3. Policy effectiveness reviews

- Apart from the Lake Taup catchment, the current regional plan does not address how to manage activities on land to protect water quality and appropriately manage the effects of excessive amounts of sediment, bacteria and nutrients entering water bodies.
- The Office of the Auditor-General's 2011 report on freshwater quality highlighted that more is needed to manage the risks to water quality in the Waikato than the current mix of regulatory and non-regulatory methods.
- A 2011 policy effectiveness review of the current regional plan suggests managing the effects of agriculture on water bodies is the most important matter to deal with and that the plan's provisions are not enough to address the ongoing pressures.

- A specific review of the extent to which the current regional plan gives effect to the Vision and Strategy is complete, as legally required, and further supports the need for a plan change.

4. Stakeholder and community expectations

- Water pollution is consistently the most important environmental issue for the Waikato community. In a 2013 survey, when asked about the most important environmental issue facing the Waikato region, 67 per cent of responses related to water quality or pollution. People want the rivers to support a range of uses.
- The rivers are taonga to iwi, who have long been concerned about their management. This project plays a part in fulfilling iwi aspirations for the Waikato River. Iwi seek the restoration and protection of the health and wellbeing of the Waikato River and recognition that the river's strategic importance to New Zealand's social, cultural, environmental and economic wellbeing requires the restoration and protection of its health and wellbeing. Iwi anticipate restoration of the river's water quality so that it is safe for people to swim in and take food from over its entire length. Iwi also expect the rivers to provide for economic uses and opportunities, and some iwi would like drinkable water bodies.
- Industry expects to be able to continue to use water from the rivers, and for the rivers to provide for future economic opportunities.

The council is beginning a regional plan review process now due to timeframes set down in the National Policy Statement for Freshwater Management 2011 and the Vision and Strategy for the Waikato River/Te Ture Whaimana o Te Awa o Waikato.

- The *National Policy Statement for Freshwater Management 2011* requires regional councils to set freshwater objectives and limits and manage discharges as soon as possible, and ideally to make changes necessary to implement the NPS by 31 December 2014.
- As this timeframe is not achievable, the council is permitted to develop a programme setting out stages and timeframes for full implementation by 2030.
- The Waikato River Authority, which plays an important role as guardians of the Vision and Strategy and in managing the rivers, can start a review of the *Vision and Strategy for the Waikato River/Te Ture Whaimana o Te Awa o Waikato* in 2016 and can set targets and limits for the catchments, which the regional plan would have to give effect to.

Other Waikato Regional Council water management work includes:

- Variation 6 - a new policy to manage water quantity, including new consents for dairy shed water takes
- a trial system for monitoring compliance with dairy effluent rules designed to protect water bodies, involving more ground-based work with farmers to identify and fix problems
- Variation 5 - policy to protect Lake Taupō's water quality which has seen great progress on reducing nutrients getting into the lake and the establishment of nutrient discharge caps on relevant farms around the lake.