POLICY DEVELOPMENT AND IMPLEMENTATION – AN UPDATE FROM WAIKATO REGIONAL COUNCIL

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Abstract
The Healthy Rivers: Plan for Change/Wai Ora: He Rautaki Whakapaipai project is working with stakeholders to develop changes to the Waikato Regional Plan to help restore and protect the health of the Waikato and Waipa rivers.

Waikato and Waipa River iwi and Waikato Regional Council are partners on this project, as set out in settlement and co-management legislation for the Waikato and Waipa rivers.

Collaborating with stakeholders to develop the plan change
The Collaborative Stakeholder Group (CSG) is the central channel for stakeholder and broader community involvement in the project. This group will:

- actively involve communities affected and understand their views
- play a key role in leading further opportunities for involvement
- review and deliberate on technical material on the environmental, social, cultural and economic complexities of the project
- recommend solutions to decision makers.

An alliance of technical experts
The Technical Alliance will collate, analyse, summarise and present environmental, social, cultural and economic information about the rivers and the consequences of different land management scenarios. This information will be used by the Collaborative Stakeholder Group and decision makers on the proposed plan change.

Preparing for farming within limits
In anticipation of the objectives, limits and targets to be included in the plan change, Waikato Regional Council is working with stakeholders to prepare the agriculture industry for the change. This work includes developing menus of practices to improve water quality, supporting the joint DairyNZ / Waikato River Authority Sustainable Milk Projects, and bringing the Massey nutrient management courses to the region to build capacity among rural professionals.

When it's happening
We expect to notify the proposed plan change in 2015. Allowing a couple of years for hearings, and any Environment Court appeals, the whole plan could be operative in 2019. Plan changes for the remainder of the region will follow over subsequent years.

Introduction
The current Waikato Regional Plan (WRP) became operative in 2007 following an extended period of analysis, development, consultation and negotiation. Several factors now combine to drive the need for changes to the WRP. Healthy Rivers: Plan for Change/Wai Ora: He Rautaki Whakapaipai is the name given to the Waikato Regional Council's (WRC's) project to address this need.

The four key drivers for this project are:

1. Legal requirements

- Waikato Regional Council is the agency with statutory responsibility under the Resource Management Act 1991 for managing freshwater resources.
- The Government's National Policy Statement for Freshwater Management 2014 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 Karāpiro to the mouth of the Waikato River. From 2009 to 2013 84% of Waipa River and 83% 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.

Table 1 Water quality trends in thee Waikato and Waipa Rivers

Contaminant/s	**Trends/ levels**	**Sources**
nitrogen	rising trend in both rivers over the last 20 plus years	Rising trend due to land use changes and intensification Mainly non-point sources, a small amount from point sources Much of the overall nitrogen load comes from farmland, particularly from urine excreted onto paddocks. Municipal sewage and industrial discharges are already regulated and are minor sources. Urban stormwater is already regulated and considered to be a minor source.
phosphorus	Waipa: moderate levels, trends vary along the river, but rising in most downstream site Waikato: moderate but mostly stable levels	Much of the overall phosphorus load comes from: • soil washed off agricultural land • run off containing dissolved phosphorus • farm animal dung. Municipal sewage and industrial discharges are already regulated and are minor sources. Urban stormwater is already regulated and considered to be a minor source.
sediment	Waipa: high but stable levels Waikato: high levels in the lower Waikato	Landslides and streambank erosion are the main sources for the Waipa. Two thirds of the sediment in the lower Waikato comes from the Waipa. Municipal sewage, urban stormwater and industrial discharges are already regulated and considered to be minor sources. 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.
bacteria	Waipa: high but stable levels Waikato: moderate levels from below Karāpiro to the mouth	Comes from dung of: • farm animals • animals living in the bush e.g. pigs, goats • birds e.g. ducks, swans In the Waipa, farm animal dung is the likely dominant source. Municipal sewage, urban stormwater and septic tank and industrial discharges are already regulated and considered to be minor sources.

- 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.

3. Policy effectiveness reviews

- Apart from the Lake Taupō 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 a 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.

Collaborative approach

The project is following a collaborative approach as detailed in diagram 1 below. This provides for Waikato Regional Council's co-management responsibilities while ensuring that the plan change can be developed by stakeholders through the Collaborative Stakeholders Group (CSG). The CSG in turn will be supported by information from the Technical Leaders Group (TLG). The purpose of the TLG is to ensure that as much as possible technical issues will be addressed early in the process rather than in court at the end of it.

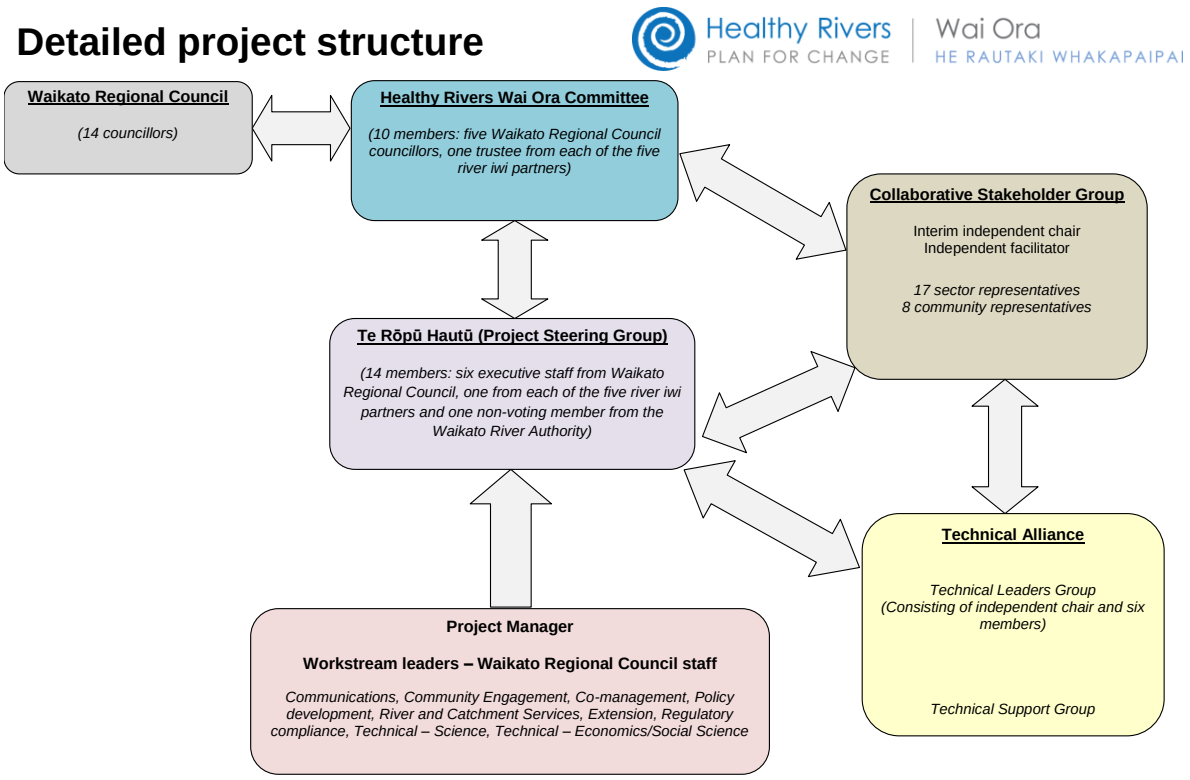

***Diagram 1** Detailed project structure*

What the Plan Change will include

This project will set objectives, limits and targets for the different water bodies in the catchments, as required by the National Policy Statement for Freshwater Management 2014.

The plan change will set limits and targets for sediment, bacteria, nitrogen and phosphorus entering water directly or via land. It will address adverse effects of point and non-point source discharges of these four contaminants entering water bodies in the Waikato and Waipa catchments. Over time this will improve both water and habitat quality, contributing to improved aquatic biodiversity and food safety of fisheries/kai species.

Measures to reduce the amount of contaminants entering water bodies can benefit habitat, and vice versa. For example, riparian margins help filter out contaminants, thus reducing their impact on waterways. They also benefit habitat by providing shade, food and shelter for aquatic life and reducing stock trampling of spawning areas and beds. Conversely, measures to benefit habitat, such as protecting wetland areas, can also reduce the amount of contaminants entering water. Measures purely to benefit habitat, such as culverts which assist fish passage, will become part of the wider Waikato Regional Plan review.

Preparing for change

Recognising that limits and targets will create a new working environment for farmers in the catchment WRC is working with industry to ensure that systems are in place to help farmers to make the necessary adjustments to their businesses.

This work has a substantial emphasis on developing nutrient management capacity among rural professionals and has included a partnership with DairyNZ to bring the Massey Intermediate and Advanced Nutrient Management Courses to Hamilton and recruiting rural

professionals to attend. There are now 102 Waikato based people who have completed the advanced course. In addition the DairyNZ / Waikato River Authority (WRA) Sustainable Milk Project has involved up to 30 farm consultants with the opportunity to apply this learning on just under 700 dairy farms in the Upper Waikato Catchment. The Sustainable Milk Project has now extended to the Waipa Catchment.

In addition the Waipa Catchment Plan is providing farmers with an opportunity to address soil conservation, sedimentation, stream stability and nutrient management issues. Once again this work is jointly funded by WRA and operates in tandem with the Sustainable Milk Project.

Finally the "Menus of practices to improve water quality" have brought together information on mitigations for nutrient, sediment and bacterial contamination from farms with an assessment of their effectiveness and associated costs. The electronic form of the menus can be found at www.farmmenus.org.nz. This has been a product of WRC and the Upper Waikato Primary Sector Partnership and has involved eight participating organisations agreeing on the relevant assessments. The menus now form a key part of the Sustainable Milk Project and Beef+Lamb NZ's Land and Environment Plan programme.

Revised Timeline
Key dates in the revised timeline are shown in table 2.

Table 2 *Revised timeline*

Feb - Nov 2015	Develop the options and policy mix Mar-Apr 2015: Stakeholder forum, community events and survey to get feedback on the CSG's work to date Sep-Nov 2015: Stakeholder forum, community events and survey to get feedback on policy options
Dec 2015 - Apr 2016	Finalising the policy toolkit
Apr 2016	Proposed plan change goes to council for adoption and will be publicly notified shortly thereafter
Jun 2017	Formal submission and hearing processes expected to finish

Allowing a couple of years for hearings, and any Environment Court appeals, the whole plan could be operative in 2019.

Conclusion
Policies related to nutrient management on farms in the Waikato region are currently being revised as part of the Healthy Rivers: Plan for Change/Wai Ora: He Rautaki Whakapaipai project. This project arises from legal, social and environmental pressures and will establish objectives, limits and targets for the Waikato and Waipa Rivers.

The policy review process is being carried out in a co-management partnership with the river Iwi, using a collaborative process based on the Collaborative Stakeholder Group, supported by technical input from the Technical Leaders Group.

It is acknowledged that these policy changes will impact on farmers in the catchment and Waikato Regional Council is working with agriculture industry organisations to ensure that systems are in place to help farmers to adapt when the policies are implemented.