Cultural Impact Assessment

In relation to an application to discharge treated meatworks effluent to the Oroua River

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1. Introduction

1.1. This Cultural Impact Assessment has been prepared on behalf of Ngāti Kauwhata in response to a resource consent application from AFFCO New Zealand Limited (AFFCO). The application is for consents to allow 5 activities:

1) discharge of treated meatworks effluent and associated solids and sludges to land;
2) discharge of odours and aerosols to air arising from the discharges to land;
3) discharge of treated meatworks effluent to groundwater by seepage from wastewater treatment ponds;
4) discharge of treated meatworks effluent to the Oroua River; and
5) construction of a discharge structure and bed level control structure in the bed and banks of the Oroua River and a tributary (that is un-named in the application).

1.2. This Cultural Impact Assessment is particularly concerned with activity (4): the **direct discharge of treated meatworks effluent to the surface waters of Oroua River**. The effects of activity (1): **discharge of treated meatworks effluent and associated solids and sludges to land** have also been considered. The author understands that AFFCO is applying for a 35 year consent term.

2. Key aspects of the proposal

2.1. Under the proposed activity, some aspects of AFFCO's current system of disposing waste to the river will remain, and some will change (see Table 1). The facets of the discharge that will stay the same are AFFCO's dual land and water discharge method, and the times of year when the different parts of that dual system are used. At the moment, AFFCO discharges treated meatworks effluent to land during summer (1 December to 30 April), and to the river during winter (1 May to 30 November). The wastewater is stored in clay-lined ponds, which cover an area of 6 hectares (ha). These parts of AFFCO's discharge system will not change. However, there are two facets that will change: the land area to which the effluent is irrigated,

and the river flow at which the discharge will occur. Under the proposal, AFFCO will increase the land area to which the effluent is being applied by 65 hectares, from 75 hectares to 140 hectares. The company will also discharge to the river when flows are at or above the median river flow of 7,590 L/s. At present, AFFCO can discharge to the river when the river is at low flow, that being 3,000 L/s.

Table 1: Comparison between proposed and current discharge

	Current discharge	Proposed discharge	Difference
Discharge system	Dual land and water	Dual land and water	None
Time of year when discharge occurs	To river: 1 May – 30 Nov (winter)	To river: 1 May – 30 Nov (winter)	None
	To land: 1 Dec-30 Apr (summer)	To land: 1 Dec-30 April (summer)	
Irrigation land area (ha)	75 ha	140 ha	**↑ of 65 ha**
River flow at which discharge is allowed (L/s)	3000 L/s	7590 L/s	**↑ of 4590 L/s**

3. Ngāti Kauwhata and the Oroua River: connections and values

3.1 The Oroua River is the ancestral river of Ngāti Kauwhata. The iwi has had connections with the river for approximately 190 years, having migrated south to Kāpiti via the river from their original Waikato homelands about 1825. Around 1832, Ngāti Kauwhata returned to the Manawatū and began living on the river. Today, the most obvious physical evidence of Ngāti Kauwhata's relationship with the river and the surrounding lands is their marae. There are three Kauwhata marae in close proximity to the river: Aorangi on Waughs/Aorangi Road, Kauwhata on Te Arakura Road, and Te Iwa near the Awahuri Bridge. Both Aorangi and Kauwhata are 1 kilometre or less from the river, with Kauwhata being opposite and less than a kilometre from the outlet of the Feilding Wastewater Treatment Plant. Currently, Te Iwa does not have any buildings, the marae having been demolished in 1936, but the author understands there are plans to re-develop the site.

3.2 Evidence of the relationship of Ngāti Kauwhata to the river also lies in their tribal pepehā, or proverb. Pepehā reinforce the connection between the people and the lands and waters that form part of their territory, and to which they have an ancestral relationship. Ngāti Kauwhata's pepehā identifies the Oroua River and the Ruahine mountains as the defining landmarks of the people:

Ko Ruahine te pae maunga
Ko Oroua te awa
Ko Ngāti Kauwhata te iwi

Ngāti Kauwhata is defined by
the Ruahine mountain range
the Oroua River
And its people (M. H. Durie, 2014, p. 2)

3.3 Drawing on Durie (2014), the author has identified several Ngāti Kauwhata concerns, values and measurements for the Oroua River. **These components form the basis of the framework that has been used to assess the cultural impacts of the proposed discharge on Ngāti Kauwhata.**

There are three broad concerns: recreational prohibitions, absence of fish life, and impacts on the cultural integrity of Ngāti Kauwhata.

There are three values: culture, nutritional properties, and spirituality.

There are five measurements: recreational safety of children and adults, abundant fish life, culturally uncontaminated, fulfilling role as kaitiaki, and endorsement from other iwi.

These concerns, values and measurements are depicted in Table 2.

Table 2: Ngāti Kauwhata concerns, values and measurements for the Oroua River

Ngāti Kauwhata		
Concerns	**Values**	**Measurements**
Recreational prohibitions	Culture	Recreational safety of children and adults
Absence of fish life	Nutritional properties	Abundant fish life
Impacts on the cultural integrity of Ngāti Kauwhata	Spirituality	Culturally uncontaminated
		Fulfilling role as kaitiaki
		Endorsement from other iwi

4. Report structure

The rest of this report is presented in six sections:

4.1. Section 5 presents the approach that has been used to assess the impacts of the proposed discharge on Ngāti Kauwhata.

4.2. Section 6 describes Ngāti Kauwhata's relationship with the Oroua River in the context of river pollution. It draws on Ngāti Kauwhata evidence that **strongly suggests** this relationship has been degraded by point source contamination from the AFFCO and Feilding Sewage Treatment Plants to the point where, in a practical sense, this relationship almost no longer exists.

4.3. Sections 7 and 8 present some science-based information about the state of the river, and the physical effects of the proposed discharge on the river. The purpose of these sections is to provide context for understanding the physical health of the river, and the impacts of the proposal on this aspect of river health.

4.4. Section 9 sets out the policy framework that is relevant to the application. There are five policies and other documents that make up this framework: the Resource Management Act 1991, the operative One Plan, the National Policy Statement for Freshwater Management 2014, the Manawatū River Leaders' Accord and Action Plan, and the Oroua Declaration.

4.5. Section 10 presents conclusions and recommendations for AFFCO and Horizons Regional Council from this Cultural Impact Assessment.

5. Assessment approach

5.1. The approach that has been used to assess the impacts of the proposed discharge on Ngāti Kauwhata has involved six stages:

(1) identifying Ngāti Kauwhata's concerns and values for the Oroua River, and their measurements for a healthy river that sustains them physically, spiritually, culturally and emotionally. These criteria are presented in Tables 2 and 3.
(2) understanding the state of Ngāti Kauwhata's relationship with the Oroua River using documents prepared by or for them;
(3) understanding the current condition of the Oroua River drawing on state of the environment and other technical reports prepared by or for the regional council;
(4) comparing the impacts of the proposed discharge with the current discharge to assess whether there will be improvement, or not;
(5) contrasting the effects of the proposed discharge with the operative One Plan targets to evaluate whether the new regime will meet the Horizons Regional Council's standards for sustainable river management; and
(6) layering (4) and (5) over (1), (2), (3), and other information to make a judgement about the cultural impacts of the proposed discharge on Ngāti Kauwhata.

6. Ngāti Kauwhata's current relationship with the Oroua River

6.1. According to the 2013 census, Ngāti Kauwhata has a population of approximately 1400 individuals. Nearly 60% of these people still live in the Manawatū-Whanganui region, potentially close enough to the Oroua River to maintain a relationship with it.

6.2. However, the evidence suggests that many Ngāti Kauwhata descendants do not use the river now, and have not used it for several years. In 2012, Rauhuia Environmental Services Te Maru o Ruahine Trust and Ngā Kaitiaki o Ngāti Kauwhata prepared a Cultural Impact Assessment of the Feilding Sewage Treatment Plant discharge on Ngāti Kauwhata's values (Rauhuia Environmental Services Te Maru o Ruahine Trust and Ngā Kaitiaki o Ngāti Kauwhata, 2012). As part of preparing the report, the authors surveyed 100 Kauwhata members using a questionnaire. The questionnaire asked for information about sites of significance, river use, personal position on the discharge, and solutions. Responses were received from 63 participants. The authors summarised the responses of 48 participants in their report. Of those 48 Kauwhata members, 44 (92%) stated they do not use the river, 2 did not answer the question, and 2 indicated they use the river, but above Feilding between London Ford and Colyton. The most common reasons for not using the river were pollution and health risks (47% of responses). For the other 53% of responses, reasons for not using the river were not identified in the summary.

6.3. In 2013, Ngā Kaitiaki o Ngāti Kauwhata prepared a report on aquatic insect monitoring in the Oroua River (Ngā Kaitiaki o Ngāti Kauwhata, 2013). Three Kauwhata kaitiaki (guardians) had been involved in a two year project monitoring macroinvertebrates in the river between 2011 and 2013. They sampled 9 sites[1] between Kimbolton and Kopane. In the course of their project, the team found that there were no longer any mahinga kai sites – customary food gathering areas – along the river. For example, a historical river access point close to the Kauwhata marae on Te Arakura Road cannot be used for swimming or drinking because it is downstream of the Feilding Sewage Treatment Plant outlet.

6.4. Moreover, there has been a rāhui (a ban or restriction) on the river since between the 1940s and the 1960s. Past generations imposed the rāhui to ban swimming and fishing below the freezing works and sewage treatment plant. The rāhui, while meant to be temporary, remains 50-70 years after it was first applied. In that time, two to three generations of Ngāti Kauwhata have been practically alienated from the river, and have not been able to use the river to provide either for themselves

[1] Kimbolton, Coulters, Almadale, Colyton, Aorangi, Boness, Awahuri, Kopane

or for manuhiri (visitors). Not being able to provide manaakitanga (hospitality) to manuhiri has been a source of embarrassment for marae elders (M. H. Durie, 2014).

6.5. The Ngāti Kauwhata kaitiaki who monitored the Oroua River between 2011 and 2013 also found that there is no access to their waahi tapu sites on the river because those sites are on private land (Ngā Kaitiaki o Ngāti Kauwhata, 2013). In responses to the questionnaire administered by Rauhuia Environmental Services Te Maru o Ruahine Trust and Ngā Kaitiaki o Ngāti Kauwhata, 21 respondents indicated they knew there were waahi tapu sites on the river, but all of them also signalled they do not use the river because of pollution (Rauhuia Environmental Services Te Maru o Ruahine Trust and Ngā Kaitiaki o Ngāti Kauwhata, 2012).

6.6. The ability to exercise tikanga in relation to the river relies on being able to use the river. The evidence suggests that apart from a very small number of people who use the river above Feilding, most Kauwhata descendants do not use the river and have not used it for several decades.

6.7. Durie (1998) defines kaitiakitanga as the burden incumbent on tangata whenua to be guardians of a resource or taonga for future generations. Ngāti Kauwhata carry this burden, but their ability to safeguard the Oroua River for future generations has been severely diminished by pollution, and by not being able to control that pollution. In the context of this application, such control is exercised by the Horizons Regional Council and by AFFCO. For Ngāti Kauwhata then, fulfilling kaitiaki obligations is about two things: restoring the health of the Oroua River and the ability of future generations to use it, and reclaiming some control over activities that affect the river. The Waitangi Tribunal (1985) has defined the authority to control as mana and rangatiratanga (p. 70).

6.8. Restoring the health of the river is not just about meeting all of the science-based targets for the river, although to do so would be a significant step in the right direction. The cultural health of the river goes beyond physical parameters to also encompass spiritual, cultural, and emotional dimensions. These aspects might serve as additional criteria for assessing the proposed discharge, and the mauri or life force of the river. For each criteria, indicators might be applied and questions might be posed that enable the river to be assessed in finer detail. Examples of such questions[2] are provided below.

[2] These examples are based on Rauhuia Environmental Services Te Maru o Ruahine Trust and Ngā Kaitiaki o Ngāti Kauwhata (2012)

- Spiritual: is the river waahi whakamoemiti (a place of spiritual cleansing)?
- Cultural: is the river waimāori (a freshwater supply)? Is the river mahinga kai (a traditional source of food supply)
- Emotional: is the river a safe waahi takaro (recreational place) for children?

These criteria and indicators are set out in Table 3.

Table 3: Additional criteria and indicators for assessing the health of the Oroua River from a Ngāti Kauwhata perspective

Dimension	Indicators
Physical	E.coli, ammonia, nitrogen, phosphorus, macroinvertebrates, clarity, periphyton
Spiritual	Waahi whakamoemiti, a place of spiritual cleansing
Cultural	Waimāori, a freshwater supply Mahinga kai, a traditional food supply
Emotional	Waahi takaro, a safe recreational place for children

7. State of the Oroua River

7.1. Unlike the Manawatū River, which is most affected by non-point source contamination from farms, the Oroua River is most affected by point-source contamination. The discharges from the AFFCO and the Feilding Wastewater Treatment plant are the main causes of pollution in the Oroua River (K. McArthur & Clark, 2007).

7.2. According to the 2005 State of the Environment Report on water quality in the Manawatu-Whanganui region (Horizons Regional Council), the upper reaches of the Oroua River are: almost always safe to go swimming because of low E.coli levels, almost always clear enough for swimming, almost never too nutrient rich, almost never too nitrate rich, and have phosphorus levels that are almost always satisfactory. The state of the macroinvertebrate communities in these reaches indicate the river is in excellent ecological health (K. J. McArthur, 2014). Consequently it supports native fish and trout and the odd whio (blue duck) (ibid.).

7.3. Down to Feilding, water clarity/turbidity is fair, as are nitrate levels (Horizons Regional Council, 2005). Phosphorus levels, however, are poor (ibid).

7.4. Below Feilding, nitrate levels are poor, and phosphorus levels are very poor (Horizons Regional Council, 2005). Gibbard, Roygard, Ausseil and Fung (2006) also found a significant increasing trend for turbidity at Nelson Street in Feilding

(upstream of AFFCO) and at the Awahuri Bridge, indicating decreasing clarity over time.

7.5. McArthur and Clark (2007) observed that for the 7 years between 1989 and 2006 the Oroua River at low flow did not meet the Soluble Inorganic Nitrogen or Dissolved Reactive Phosphorus standards set by the regional council. They concluded that both the AFFCO meat processing plant and the Feilding Wastewater Treatment Plant had the capacity to exceed the phosphorus standard in the Proposed One Plan individually, making their cumulative contributions to Dissolved Reactive Phosphorus loads in the river extremely high. The Dissolved Reactive Phosphorus load in the Oroua River at the Awahuri Bridge was almost 10 times the Proposed One Plan standard.

7.6. Downstream of Opiki in the Rangitāne rohe (tribal area), McArthur and Clark (2007) also found that the total phosphorus load from point source discharges exceeded the Dissolved Reactive Phosphorus standard at half median flows or less[3]. Most of this load was contributed by the Oroua catchment, in particular the Feilding Wastewater Treatment and AFFCO plants. The Oroua River enters the Manawatū River just downstream of Opiki and Te Rangimarie Marae at Rangiotu.

8. Physical effects of the proposed discharge

8.1. Based on the science information that has been used to prepare this report, seven indicators have been selected as particularly relevant to Ngāti Kauwhata's concerns, values and measurements for the Oroua River. These indicators, and their relevance, are set out below:

1) E. coli – causes illness.
2) Ammonia – toxic to fish.
3) Dissolved Reactive Phosphorus – causes periphyton growth, which in excess negatively affects the river food web.
4) Nitrogen – causes periphyton growth, which in excess negatively affects the river food web.
5) Macroinvertebrate Community Index – indicates the health of the macroinvertebrates[4] in the river, which the fish and other animals in and around the river eat.
6) Clarity – essential for fish to see their prey.

[3] Half median flow in the Oroua River between 1993 and 2005 was 3,908 L/s.
[4] Macro-invertebrates are animals that do not have a backbone and are large enough to be seen with the naked eye. They include insects, snails and worms (Parliamentary Commissioner for the Environment, 2012).

7) Periphyton – is the base of the river food web, but at excessive levels is poor food for macroinvertebrates, detrimental to fish, and a dangerous nuisance for people.

8.2. The E.coli indicator relates directly to Ngāti Kauwhata's concerns regarding recreational prohibitions on the river, to their values for safe use of the river, and to their measurement regarding recreational safety of tamariki (children) in the river.

8.3. Ammonia, Dissolved Reactive Phosphorus, Nitrogen, Macroinvertebrate Community Index, Clarity and Periphyton all relate to the health of the river for fish life. Therefore, they correspond to Ngāti Kauwhata's concerns about the absence of fish life, the value they place on the river in terms of its nutritional properties, and their measurement concerning abundant fish life.

8.4. The relevance of these indicators and the relationship between them and Ngāti Kauwhata's concerns, values and measurements is illustrated in Table 4.

Table 4: Relationship between scientific indicators of river health and Ngāti Kauwhata concerns, values and measurements

Science indicator	Relevance	Ngāti Kauwhata		
		Concerns	Values	Measurements
E.coli	Causes illness	Recreational prohibitions	Safe use	Recreational safety of children
Ammonia	Toxic to fish	Absence of fish life	Nutritional properties	Abundant fish life
Nitrogen	Causes periphyton growth, negatively affects river food web	Absence of fish life	Nutritional properties	Abundant fish life
Phosphorus	Causes periphyton growth, negatively affects river food web	Absence of fish life	Nutritional properties	Abundant fish life
Macroinvertebrate Community Index	Indicates health of macroinvertebrates in the river, which fish and other animals eat	Absence of fish life	Nutritional properties	Abundant fish life
Clarity	Essential for fish to see prey	Absence of fish life	Nutritional properties	Abundant fish life
Periphyton	In excess, poor food for macroinvertebrates, detrimental to fish, hazard and nuisance for people	Absence of fish life	Nutritional properties	Abundant fish life
			Safe use	Recreational safety of children and adults

8.5. These indicators do not readily relate to Ngāti Kauwhata's concerns about the impacts of river pollution on their cultural integrity, their spiritual values for the river, and the measurements that relate to those concerns and values (culturally uncontaminated, fulfilling role as kaitiaki, and endorsement from other iwi). This inconsistency emphasises that physical pollution and spiritual pollution are not the same thing. Dealing with physical contamination is one matter; addressing spiritual contamination is another.

8.6. According to Ausseil and Death (2014), the proposed discharge will have the following effects on the seven indicators identified above:

8.7. **E.coli:** the proposed discharge is predicted to cause an increase in E.coli of 4.8 E. coli/100 mL downstream of AFFCO, compared with upstream. The One Plan target

is 550 E.coli/100 mL. In winter, in flows less than flood flows, average E.coli counts upstream of the AFFCO discharge are 237 E.coli/100 mL.

8.8. **Ammonia:** Under the proposed discharge, the concentration of ammonia in the Oroua River averaged over seven days downstream of AFFCO is estimated to be 0.218 g/m3. The One Plan chronic toxicity target for ammonia is 0.400 g/m³.

8.9. **Nitrogen:** the proposed discharge will cause the average concentration of Soluble Inorganic Nitrogen downstream of AFFCO to increase, compared with upstream. The concentration is predicted to be 0.255 g/m3, which is below the One Plan target of 0.444 g/m³.

8.10. **Dissolved Reactive Phosphorus:** the proposed discharge is estimated to increase Dissolved Reactive Phospohorus in the river downstream of the AFFCO discharge by 10% compared with upstream. At this concentration, the One Plan target of 0.010 g/m³ will be exceeded by 6%. The current discharge exceeds the target by 75%. Thus, the proposed discharge will be an improvement on the current one, but will still fail to meet the One Plan target, the purpose of which is to protect the river. Thus, it is essential that the discharge meets the target. Changes to the discharge regime and appropriate consent conditions will be needed to give Ngāti Kauwhata confidence that some their concerns about the river will be alleviated.

8.11. **Macroinvertebrate Community Index:** Stark (2011, cited in Ausseil, 2014) found that Quantitative Macroinvertebrate Community Index (QMCI) scores downstream of the AFFCO discharge exceeded the One Plan targets, which set a limit of a maximum 20% reduction in QMCI score. In their assessment of the effects of the proposed discharge on the Oroua River, Ausseil and Death (2014) did not forecast how the new discharge might affect macroinvertebrate communities downstream of AFFCO. This deficit is important, and must be addressed.

8.12. The Ngāti Kauwhata kaitiaki who monitored the Oroua River for macroinvertebrates found that the Kimbolton site had the highest number of excellent scores throughout the monitoring project, and the Awahuri and Kopane sites had the highest number of poor scores. The team made the following recommendations:

- That further aquatic insect monitoring be undertaken on the river to provide a historical pattern and substantial data to encourage a robust argument for change.
- That Cultural Health Monitoring be incorporated into future monitoring projects as an addition to insect sampling.

- That chemical water analysis assessing levels of faecal bacteria and nutrient levels in the water might be useful knowledge for Ngāti Kauwhata hapū to assess the effects of activities on the river (Ngā Kaitiaki o Ngāti Kauwhata, 2013).

8.13 As previously mentioned, the team also found there were no longer any mahinga kai sites along the sections of the river where they undertook the monitoring. Under the Cultural Health Index (Tipa & Teirney, 2003), the presence of mahinga kai sites (traditional and contemporary) is an indicator of the cultural health of a stream or river. It may be beneficial to map traditional mahinga kai sites, and to reinstate those sites over time, and/or identify new ones that could be used.

8.14 **Periphyton:** Ausseil and Death (2014) predicted periphyton would decrease downstream of the AFFCO discharge under the proposed discharge regime, but **they could not be certain an improvement would actually occur**. They modelled that periphyton would increase between 1% and 5% downstream of the AFFCO site under the proposed regime, compared with periphyton increases of between 10% and 35% under the current consent. Their modelling was based on changes in nitrogen and phosphorus inputs.

8.15 In her evidence on the Feilding Wastewater discharge, McArthur (2014) noted that the primary influence on periphyton growth in rivers is flow, followed by nutrients. Even though the proposed regime increases the minimum flow at which the discharge can occur, McArthur (ibid) asserts that periphyton will still accrue at flows below flood flows if nutrients are available. Her evidence raises some questions around Ausseil and Death's predictions, and places even more emphasis on the need for the proposed discharge to meet the nutrient targets in the One Plan.

The relationship between these indicators, the effect of the proposed discharge on the river, the One Plan targets, and remedial actions is shown in Table 5.

Table 5: Relationship between science indicators, downstream effects of proposed AFFCO discharge and One Plan targets

Science indicator	Effect downstream of proposed AFFCO discharge	One Plan target	Within One Plan target	Action required
E.coli	↑ of 4.8 E.Coli/100 mL above 237 E.Coli/100 mL upstream[5]	550 E.Coli/100 mL water	Yes	
Ammonia	0.218 g/m³ in river averaged over 7 days	0.400 g/m³ chronic toxicity	Yes	
Nitrogen	↑ compared with upstream. Concentration of 0.255 g/m³	0.444 g/m³	Yes	
Phosphorus	↑ compared with upstream. **Concentration of 0.016 g/m³**	0.010 g/m³	**No**	**Yes. Reduce phosphorus in discharge**
Macroinvertebrate Community Index	**Limited data**	No more than a 20% reduction in Quantitative Macroinvertebrate Community Index score	**Unknown**	**Yes, including ensuring Phosphorus target is met and supporting iwi and other macroinvertebrate monitoring**
Clarity	3.3% ↓ in clarity compared with upstream	No more than a 30% reduction in visual clarity	Yes	**Yes. Effect is based on an assumption. Include consent condition to ensure actual effect resembles predicted effect**
Periphyton	**Predicted** 1-5% ↑ in periphyton	Maximum periphyton cover as filamentous algae must not exceed 30%	**Yes, theoretically**	**Yes. Modify discharge to ensure Phosphorus targets are met. Support iwi and other periphyton monitoring**
		Maximum periphyton cover as diatoms or cyanobacteria must not exceed 60%		

[5] Based on average E.coli counts/100 mL during winter at flows below flood flows upstream of the AFFCO site. See Table 2, p. 11, in Ausseil and Death (2014)

8.16 Ngāti Kauwhata also have concerns about the effects of the proposed irrigated discharge to land. These concerns relate to the discharge running off or leaching into other waterways on or connected to the irrigated land area. The author notes that no sites of significance were identified in the Assessment of Environmental Effects of Discharge of Meatworks Effluent to Land, and the ephemeral stream to which the discharge to the Oroua River is channelled (and which Ngāti Kauwhata have partially planted in recent years) was identified as un-named. As part of a wider mapping project (see para 10.8) it is important that sites on the irrigated area that are significant to Ngāti Kauwhata are recorded, so they can be factored into decisions about the discharge in a way that reflects their significance. It may also be appropriate to monitor these sites.

9. Policy Framework

The policy framework for considering the effects of the AFFCO discharge on Ngāti Kauwhata comprises the following:

- Resource Management Act 1991
- Operative One Plan
- National Policy Statement for Freshwater Management 2014
- Manawatu River Leaders Action Plan
- Oroua Declaration

9.1. Resource Management Act (RMA) 1991

9.1.1. The RMA provisions that are relevant to AFFCO's application are sections 6(e), 7(a) and 8. These sections require that in achieving the purpose of the Act, the consent authority shall:

- recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga as a matter of national importance (section 6(e));
- have particular regard to kaitiakitanga (section 7(a));
- take into account the principles of the Treaty of Waitangi (section 8).

9.1.2. The ancestral relationship of Ngāti Kauwhata to the river is undeniable, and is evident in their histories, oral traditions and physical occupation of the river. However, in the context of the AFFCO application, one of the central points to note is that **Ngāti Kauwhata no longer have a living, active relationship with the Oroua**

River. That relationship ceased several decades ago as a direct consequence of the AFFCO and Feilding Sewage Treatment Plant discharges.

9.1.3. For Horizons Regional Council then, recognising and providing for Ngāti Kauwhata's relationship with the Oroua River must go beyond merely acknowledging the tribe's ancestral connection with the river. In this situation, **'recognising and providing for' must mean restoring an active and living relationship between the people and the river**. Indicators of an active and living relationship include Ngāti Kauwhata members using the river to swim, collect kai and carry out ceremonies.

9.1.4. Ngāti Kauwhata are the kaitiaki of the Oroua River, and as such, are responsible for safeguarding the river for future generations. Ngāti Kauwhata also have obligations to other iwi and hapū downstream of the Oroua River – including Rangitāne, Muaūpoko, and all 25 hapū and iwi of Ngāti Raukawa – to advocate for an end to the river being polluted. These obligations are inter-generational; they persist over time. Because of these responsibilities, **Ngāti Kauwhata cannot support continued point-source contamination of the Oroua River**.

9.1.5. In the context of the AFFCO application, having particular regard to kaitiakitanga means considering the effects of the proposed discharge *over several generations*. There are the generations that have not been able to exercise kaitiakitanga over the river because they have not been able to use it or protect it. There is the generation that will live with the consequences of the decision on the current application. There are generations to come, for whom Ngāti Kauwhata want a different and better future.

9.1.6. The principles of the Treaty of Waitangi that are most relevant to the AFFCO application are active protection and tino rangatiratanga. In its report on the Manukau claim, the Waitangi Tribunal (1985) emphasised that active protection of Māori fisheries meant that all of the values – cultural, spiritual and physical – associated with those fisheries must be protected. The Tribunal stated that the 'protection of fisheries must accord with the Maori perception of those fisheries. It must be recognised that those disruptions of fisheries that offend cultural or spiritual values, as for example the discharge of animal wastes to the waters of the fishery, is as offensive as a physical disruption that reduces the quantity or quality of the catch. The guarantee of undisturbed possession [in Article 2 of the Treaty] means that there must be regard for the cultural values of the possessor' (p. 70).

9.1.7. It is not just the resource that requires active protection, however, but the rangatiratanga and mana of the people; that is, the authority of the people to control the resource and how it is used (see Waitangi Tribunal, 1985, p. 70). In its

Motunui-Waitara report (1983), the Waitangi Tribunal considered that 'the Maori text of the Treaty would have conveyed to Maori people that amongst other things they were to be protected not only in the possession of their fishing grounds, but in the mana to control them and then in accordance with their own customs and having regard to their own cultural preferences' (p. 51). In the context of the AFFCO discharge and other activities that impact on the river, taking into account tino rangatiratanga and mana points to creating meaningful avenues for Ngāti Kauwhata to actively contribute to planning for, and making decisions about, the river.

9.2. Operative One Plan

9.2.1. There are several provisions in the One Plan that are relevant to the AFFCO application.

9.2.2. Chapter 2.2 identifies several water quality issues as being significant to tangata whenua in the region. Issues (a), (d) and (h) confirm that:

- *Management of water quality throughout the region does not provide for the special qualities significant to Māori (Issue (a)).*
- *Access to and availability of clean water to exercise cultural activities such as food gathering and baptismal rituals have diminished (Issue (d)).*
- *Sewage disposed to water, in treated form or otherwise, is culturally abhorrent. Land-based treatment is preferred (Issue (h)).*

9.2.3. It is clear that the Oroua River has not been managed in a way that provides for the qualities that make it significant to Ngāti Kauwhata. It is also obvious that the river is neither physically nor spiritually clean enough for the iwi to use it for food gathering and ceremonies. While the AFFCO discharge does not contain human sewage, the discharge is offensive nonetheless.

9.2.4. Objective 2.1(a) requires Horizons: 'To have regard to the mauri of natural and physical resources to enable hapū and iwi to provide for their social, economic and cultural wellbeing'.

9.2.5. Objective 2.1(b) confirms that: 'Kaitiakitanga must be given particular regard and the relationship of hapū and iwi with their ancestral land, water, sites, wāhi tapū and other taonga (including wāhi tūpuna) must be recognised and provided for through resource management processes'.

9.2.6. Pursuant to Policy 2.1, the regional council must:

Enable and foster kaitiakitanga and the relationship of hapū and iwi with their ancestral land, water, sites, wāhi tapū and other taonga (including wāhi tūpuna) through the increased involvement of hapū and iwi in resource management processes including:

a) Memoranda of partnership
b) Recognising existing arrangements and agreements between resource users, local authorities and hapū or iwi
c) Developing catchment-based forums
d) Developing, where appropriate, hapū and iwi cultural indicator monitoring programmes
e) Assisting hapū or iwi to facilitate research, projects, seminars and training
f) Developing joint management agreements where appropriate
g) Having regard to iwi management plans lodged with Council
h) Involving hapū or iwi in resource consent decision-making and planning processes in the ways agreed in the memoranda of partnership and joint management agreements developed under (a) and (f) above, and
i) the Regional Council advising and encouraging resource consent applicants to consult directly with hapū or iwi where it is necessary to identify the relationship of hapū and iwi with their ancestral land, water, sites, wāhi tapū and other taonga (including wāhi tūpuna) and the actual and potential adverse effects of proposed activities on those relationships.

9.2.7. Under Policy 2.3, Horizons must have regards to the mauri of water by implementing Policy 2.1 above. It is important to note that the initiatives in Policy 2.1 will not by themselves restore the mauri of the Oroua River. These methods must be implemented in such a way that enables the mauri to be strengthened.

9.3. National Policy Statement for Freshwater Management 2014

9.3.1. Objective D1 of the National Policy Statement for Freshwater Management requires Horizons to:

provide for the involvement of iwi and hapū, and to ensure that tangata whenua values and interests are identified and reflected in the management of fresh water including associated ecosystems, and decision-making regarding freshwater planning, including on how all other objectives of the National Policy Statement are given effect to.

9.3.2. Policy D1, directs Horizons to take reasonable steps to:

- *involve iwi and hapū in the management of fresh water and freshwater ecosystems in the region;*
- *work with iwi and hapū to identify tangata whenua values and interests in fresh water and freshwater ecosystems in the region; and*
- *reflect tangata whenua values and interests in the management of, and decision-making regarding, fresh water and freshwater ecosystems in the region.*

9.3.3. These provisions complement the One Plan provisions. Together, they strongly emphasise the need for Horizons to:

a) involve Ngāti Kauwhata in the management of the Oroua River;
b) work with Ngāti Kauwhata to identify their values and interests in the Oroua River; and
c) reflect those values and interests in managing and making decisions about the Oroua River using the arrangements, projects, processes and plans identified in Policy 2.1 of the One Plan (above).

9.4. Manawatū River Leaders' Accord and Action Plan

9.4.1. Ngāti Kauwhata, AFFCO and Horizons are all members of the Manawatū River Leaders' Forum. Under the Manawatū River Leaders' Accord the forum's goal is to:

> *improve the mauri of the Manawatū River catchment, such that it sustains fish species, and is suitable for contact recreation, in balance with the social, cultural and economic activities of the catchment community.*

9.4.2. The forum's vision is that:

- The Manawatū River becomes a source of regional pride and mana.
- Waterways in the Manawatū catchment are safe, accessible, swimmable, and provide good recreation and food resources.
- The Manawatū catchment and waterways are returned to a healthy condition.
- Sustainable use of the land and water resources of the Manawatū catchment continues to underpin the economic prosperity of the region.

9.4.3. Under the Manawatū River Leaders' Action Plan, Horizons has the task of ensuring that all new resource consents for discharges to water are practical, enforceable, and meet current Regional Plan water quality requirements. It is a priority that the AFFCO consent is processed, and that the discharge is metred and telemetered.

9.4.4. Because the Manawatū and Oroua rivers are connected, arguably, the Manawatū cannot truly become a source of mana, unless the mana of the Oroua is also restored.

9.4.5. The author understands a second iteration of the Action Plan will be released in 2016. It is essential that this updated version includes a holistic approach to all discharges to the Oroua River. There is no point improving the AFFCO discharge if there are no improvements to the Feilding Wastewater Treatment Plant discharge, and farming upstream of Feilding is allowed to intensify.

9.5. Oroua Declaration

9.5.1. Ngāti Kauwhata and the Manawatū District Council signed the Oroua Declaration in December 2015. The declaration recognises that the river makes Ngāti Kauwhata distinct, and has done so for more than 180 years. In the declaration, Ngāti Kauwhata and the council agree that the river is vital for the local economy and for the identity of Ngāti Kauwhata, that the mauri and natural habitat of the river should be protected and enhanced, and that both parties wish to work together as partners and champions for a healthy river. They agreed to establish a Mana Whakahaere Group to provide oversight and advocacy for the river's ongoing management. This group will:

1) Develop a strategic plan for the preservation and restoration of the River;
2) Foster an integrated system of management that reflects cultural, scientific, and ecological measures;
3) Seek balance between risk to the wellbeing of the river and agricultural pursuits, urban development and point source discharges along the whole course of the River;
4) Advise the parties of any threats or pressures that may have harmful consequences;
5) Meet at least once every year to discuss progress and to identify any remedial actions that need to be considered;
6) Ensure that the river remains a vital, distinctive and proud marker of Ngāti Kauwhata's and the council's joint standing in Aotearoa New Zealand.

9.5.2 It may be beneficial to establish a similar arrangement between AFFCO, Horizons Regional Council, and Ngāti Kauwhata.

10. Conclusions and Recommendations

10.1. The proposal appears to be a significant improvement on the current discharge, and the work that AFFCO has done to reduce its physical impacts on the Oroua River is to be commended.

10.2. However, Ngāti Kauwhata cannot support AFFCO's application to discharge treated meatworks effluent to the Oroua River for another 35 years.

10.3. While the proposal meets some of the One Plan targets for important physical indicators of river health, it does not recognise and provide for Ngāti Kauwhata's spiritual values for the river, and will not achieve Ngāti Kauwhata's cultural and spiritual measurements for the river.

10.4. Ngāti Kauwhata have been alienated from the river for 5 decades or more. It seems the vast majority of Ngāti Kauwhata people do not use the river because of point source pollution from the AFFCO and Feilding Sewage Treatment Plants. Despite the improvements that AFFCO will make to the discharge, pollution is still pollution. Even under the new regime, it is hard to imagine that Ngāti Kauwhata people would feel comfortable using the river downstream of AFFCO as a:

- waahi whakamoemiti, place of spiritual cleansing
- waimāori, freshwater supply
- mahinga kai, traditional food supply, or as a
- waahi takaro, safe recreational place for children.

10.5. Thus, the people will continue to be alienated from the river, potentially for another generation.

10.6. It is noted that the Environment Court in its decision on the Feilding Wastewater Treatment Plant (Decision No: [2016] NZEnvC 53) granted consents to the Manawatū District Council for 10 years, subject to conditions being finalised that were in accordance with the decision.

10.7. To avoid denying another generation access to the Oroua River, a similar consent term might be appropriate for the proposed AFFCO discharge. Within a 10 year timeframe, it would be essential for AFFCO to explore with Ngāti Kauwhata and

others, including Horizons Regional Council, options for completely removing the discharge from the river. This exploration might involve discussions with Massey University and/or other research institutes about research to develop technological options for ending the discharge to the river.

10.8. Also within that timeframe, and consistent with the relevant One Plan provisions, Horizons Regional Council might work with Ngāti Kauwhata to support them to assert mana and exercise kaitiakitanga over the river. The objective of this work would be to restore an active relationship between the iwi and the river, and to lift the mauri of the river. In fulfilling this objective, it would be a priority to:

1) Discuss re-initiating an iwi project to monitor aquatic insects in the river. It is important that such a project would receive long-term funding and support.
2) Discuss initiating a Cultural Health Monitoring initiative that would wrap around the macroinvertebrate monitoring project. Other indicators that might be included in the Cultural Health Monitoring initiative include periphyton.
3) Support a mapping project, whereby the iwi map their mahinga kai and other significant sites along the river. The purpose of this project would be to enable Kauwhata to: strengthen tribal knowledge of these sites, build a repository of information about them, use the maps to participate in planning processes, re-connect the people with their sites, use the sites as monitoring areas, and consider the future of the sites including reinstating them over time and/or identifying new ones that could be used.
4) Consider entering into an arrangement, such as a Joint Management Agreement under section 36B of the RMA, whereby Ngāti Kauwhata can contribute to planning for and decisions about the Oroua River with the Horizons Regional Council. The author notes there are now several examples of Joint Management Agreements around Aotearoa that potentially provide models and a platform on which to develop such an agreement.
5) Consider entering into a formal relationship agreement, such as a Memorandum of Partnership, under which Ngāti Kauwhata and Horizons Regional Council can agree on terms of engagement, projects, and mutual goals.

10.9. In discussions, AFFCO have been supportive of building (1) and (2) above – aquatic insect and Cultural Health monitoring – into the consent as conditions.

10.10. Conditions also need to be included that: ensure Dissolved Reactive Phosphorus in the discharge will meet the One Plan targets, provide for periphyton and macroinvertebrate monitoring above and below the discharge, and guarantee the discharge will meet the One Plan targets for clarity.

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