



Waikato River Fisheries Bylaws for the Waikato Tainui Fisheries Area

**Waikato Raupatu River Trust on behalf of Waikato-Tainui Te Kauhanganui
Incorporated**

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FOREWORD

Waikato horo pounamu
Waikato taniwharau
He piko, he taniwha
He piko, he taniwha

E te iwi, teena koutou

The Waikato River is regarded as a tuupuna (ancestor) from which our iwi derived its name. The Waikato River continues to sustain our people, its communities and the nation, and is also the home of our fisheries. Our fisheries are a taonga. They are treated as such because they sustain our way of life both physically and spiritually.

It is with much pleasure that I release new fisheries bylaws for the Waikato River. The bylaws recognise the traditional practices of Waikato-Tainui to manage the freshwater fisheries of the Waikato River for cultural and sustainability reasons.

A key pillar of the Waikato River Settlement is the co-management of fisheries resources through our own Waikato River Fisheries Regulations. These Regulations allow Waikato-Tainui to propose fisheries bylaws to ensure the careful use of the fishery within our part of the Waikato River.

This is kaitiakitanga in action.

The bylaws outlined in this document arise from the recently released Waikato-Tainui Environment Plan that was approved by Kiingi Tuheitia.

These bylaws allow the tribe to exercise mana whakahaere in managing the use of the fishery in the rivers, lakes and streams within the Waikato Tainui Fisheries Area. We have an inherent obligation to care for the fisheries taonga gifted to us by our tuupuna. We need to ensure that these taonga are safeguarded for current and future generations.

These bylaws focus on tuna (eels), an iconic taonga species that have sustained our iwi for centuries. Traditional management tools such as raahui for cultural and sustainability purposes are also considered.

Waikato-Tainui, like many iwi, is in a unique position in that we are commercial, recreational and customary fishers. These bylaws will apply to us as an iwi as much as they will apply to others. We too must uphold the rules.

I encourage you to read and uphold the bylaws to enhance the fisheries taonga of our river, streams and lakes.

He ora ngaa taonga o te awa, he ora noo te iwi.

Me noho maarire

Rahui Papa
Chair Te Arataura Chair Waikato Raupatu River Trust

INTRODUCTION

The Waikato River settlement established a new era of co-management that enables Waikato-Tainui in partnership with the Crown and with input from river users to establish fisheries bylaws for the Waikato River.

Fisheries bylaws allow Waikato-Tainui to exercise traditional management practices to prohibit and restrict, or enable fishing for cultural and sustainability reasons.

This will ensure that the fisheries resources of the Waikato River, including its lakes and streams, are enhanced and sustained into the future for all New Zealanders.

The Waikato Raupatu River Trust (Trust), a tribal entity of Waikato-Tainui, is responsible for working with our people to identify and propose fisheries bylaws to the Minister for Primary Industries. The Trust together with Waikato River Kaitiaki (guardians nominated by Waikato-Tainui marae) collaborated with the commercial eel industry in developing these bylaws.

The bylaws only apply to the fish species managed under the Fisheries Act 1996 found within the Waikato-Tainui Fisheries Area which includes the Waikato River its tributaries and lakes from Port Waikato to Karapiro, and part of the Waipa River from its junction with the Waikato River at Ngaruawaahia to the Puniu Stream.

The new bylaws give effect to the tribe's Environment Plan – Tai Tumu, Tai Pari, Tai Ao.

Bylaw 1: Incidental catch and release of eels weighing more than the maximum size limit of 2kg and female longfin eels that are in the migratory morphological phase below migration barriers

Bylaw 2: Temporary prohibition on the taking of fisheries resources from any area within the Waikato-Tainui Fisheries Area due to the occurrence of a human death

Bylaw 3: Seasonal closure prohibiting the commercial harvest of any eels from specific streams and rivers of the Whangamarino Wetland during the tuna heke (eel migration) from 1 March to 31 May.

Bylaw 4: Minimum weight for commercially harvested eels

No commercial fisher may take or possess any shortfin eel taken within the Waikato-Tainui Fisheries Area weighing less than 300 g.

No commercial fisher may take or possess any longfin eel taken within the Waikato-Tainui Fisheries Area weighing less than 400 g.

Bylaw 5: Maximum weight for commercially harvested eels

No commercial fisher may take or possess any eel taken within the Waikato-Tainui Fisheries Area weighing more than 2 kg.

Bylaw 6: Prohibition on taking of female migrant longfin eels

No commercial fisher may take or possess any female longfin eel taken within the Waikato-Tainui Fisheries Area that is in the migratory morphological phase.



FISHERIES BYLAWS (FULL WORDING)

Bylaw 1: Incidental catch and release of eels weighing more than the maximum size limit of 2kg and female longfin eels that are in the migratory morphological phase below migration barriers

1. Notwithstanding bylaw 5 and regulation 50 of the Fisheries (Commercial Fishing) Regulations 2001, a commercial fisher may take, possess and hold eels taken from within the Waikato-Tainui Fisheries Area that weigh more than 2kg for the purpose of transferring and releasing those eels below physical migration barriers as soon as reasonably practicable.
2. Notwithstanding bylaw 6, a commercial fisher may take, possess and hold female longfin eels taken from within the Waikato-Tainui Fisheries Area that are in migratory morphological phase for the purpose of transferring and releasing those eels below physical migration barriers as soon as reasonably practicable.
3. When exercising this bylaw a commercial fisher must inform a Fishery Officer as soon as reasonably practicable when taking and being in possession of eels under this bylaw and must inform a Fishery Officer as soon as reasonably practicable of the site and time of release of those eels taken under this bylaw.

Bylaw 2: Temporary prohibition on the taking of fisheries resources from any area within the Waikato-Tainui Fisheries Area due to the occurrence of a human death

1. The Trust may prohibit the taking of fisheries resources from any area within the Waikato-Tainui Fisheries Area due to the occurrence of a human death.
2. When making a decision to prohibit the taking of fisheries resources, the Trust:
 - a) must specify the relevant area to be closed, subject to sub-clause (e);
 - b) must specify the period of the closure, subject to sub-clause (f);
 - c) must specify any terms and conditions that the Trust considers appropriate;
 - d) must publicly notify the details of the closure;
 - e) must not close more than 10 kilometres of any river or stream, or any lake, pond or water body in its entirety; and
 - f) must not close any area for a period exceeding 14 days

Bylaw 3: Seasonal closure prohibiting the commercial harvest of any eels from specific streams and rivers of the Whangamarino Wetland during the tuna heke (eel migration) from 1 March to 31 May.

1. No commercial fisher may, between 1 March and 31 May (inclusive) take eels from the following areas:
 - (a) The Maramarua River and its tributaries between its intersection with State Highway 2 (at 37°14.83'S and 175°11.10'E) and its junction with the Whangamarino River (at 37°18.32'S and 175°05.09'E).
 - (b) The Whangamarino River, between its junction with the Waikato River, including an area enclosed by a circle of 200m radius with a centre point at the

junction of both rivers (at 37°17.60'S and 175°03.53'E) and its intersection with Falls Road (at 37°20.70'S and 175°10.99'E).

- (c) The Pungarehu Stream, between its junction with the Whangamarino River (at 37°20.73'S and 175°10.69'E) and Lake Waikare, including an area enclosed by a circle of 200m radius with a centre point at the mouth of the stream on Lake Waikare (at 37°24.39'S and 175°12.62'E).
- (d) Te Onetea Stream between its junction with Lake Waikare and the Waikato River, including areas enclosed by circles of a 200m radius with centre points at the mouths of the stream on Lake Waikare (at 37°25.90'S and 175°10.12'E, and at 37°26.10'S and 175°09.84), and at the junction of the stream with the Waikato River (at 37°26.15'S and 175°08.51'E).
- (e) Notwithstanding the areas closed in (a) to (d) the seasonal closure does not apply to Lake Waikare.

Bylaw 4: Minimum weight for commercially harvested eels

- 1. No commercial fisher may take or possess any shortfin eel taken within the Waikato-Tainui Fisheries Area weighing less than 300 g.
- 2. No commercial fisher may take or possess any longfin eel taken within the Waikato-Tainui Fisheries Area weighing less than 400 g.

Bylaw 5: Maximum weight for commercially harvested eels

- 1. No commercial fisher may take or possess any eel taken within the Waikato-Tainui Fisheries Area weighing more than 2 kg.

Bylaw 6: Prohibition on taking of female migrant longfin eels

No commercial fisher may take or possess any female longfin eel taken within the Waikato-Tainui Fisheries Area that is in the migratory morphological phase.

BYLAW EXPLANATION

Bylaw 1 – Incidental catch and release of eels weighing more than the maximum size limit of 2kg and female longfin eels that are in the migratory morphological phase below migration barriers within the Waikato-Tainui Fisheries Area

Objective

- Encourage the safe passage of migrant eels downstream of physical barriers
- Increase the survivability of migrant eels passing physical barriers

Explanation

Physical barriers along waterways, such as hydroelectric and water supply dams, weirs, culverts and flood control schemes not only stop upstream migration of juvenile eels but can also prevent the safe passage of migrating eels to breed at sea. High revolution hydroelectric turbines and flood control pumps are fatal to downstream migrating eels, whilst other barriers can hinder downstream eel migration. Existing regulations prohibit commercial fishers from taking and possessing commercially harvested eels heavier than the current maximum size limit of 4 kilograms (oversized eels). Under existing regulations if a commercial fisher incidentally captures an oversized eel above a barrier it must be returned to the water where it was captured. However, the return of oversized eels back to a water body above a physical barrier such as a hydro dam and flood control pump is a significant risk to the life of the eel.

This bylaw will allow commercial fishers to retain possession of incidentally caught eels weighing more than the maximum size limit, where the eels are taken from water bodies above physical barriers (i.e. hydroelectric dams, reservoirs, flood control schemes) for the sole purpose of transferring and releasing the eel back to water below the physical barrier as soon as reasonably practicable. This bylaw together with the assistance of commercial fishers will ensure eels weighing more than the maximum size limit are able to safely bypass turbines and flood control pumps. Bylaw 5 provides an upper size limit of 2 kilograms, therefore an oversized eel for the purposes of this bylaw will be an eel weighing more than 2 kilograms.

New bylaw 6 (see further below) prohibits the commercial harvesting of female longfin eels that are in migratory morphological phase. Therefore, bylaw 1 will also allow commercial fishers to retain incidentally caught female longfin eels that are in migratory morphological phase taken from water bodies above migration barriers for the purposes of transferring and releasing the eels downstream of the barrier as soon as reasonably practicable.

Bylaw 2 – Temporary Raahui - Temporary prohibition on the taking of fisheries resources from any area within the Waikato-Tainui Fisheries Area due to the occurrence of a human death

Objective

- To recognise and give effect to the cultural values of raahui
- To show respect to the deceased and whaanau (family) of the deceased

Explanation

Bylaw 2 allows the Trust in consultation with local kaumaatua and the Waikato River Kaitiaki may close an area to fishing due to a human death. When making a decision to close an area to fishing, the Trust shall specify the relevant area to be closed; specify any terms and conditions that the Trust considers appropriate; and publicly notify the details of the closure.

This bylaw would apply to all fishing sectors (commercial, recreational and customary).

Raahui (prohibitions) is an ancient practice that has been exercised by Waikato-Tainui for centuries. Many of the place names and histories of the Waikato region relate to events associated with raahui, such as Raahui Pookeka the original name of the Huntly district. Raahui prohibits a specific human activity from occurring or continuing in a particular area. Raahui may be directed to a specific group or an entire community, and could be temporary or made permanent. Raahui can be established for cultural reasons such as drowning and providing for waahi tapu, or to ensure sustainability of a resource such as eels.

In terms of drowning the purpose of raahui is to enable the body of the deceased to be recovered. A person such as a kaumaatua who is well versed in the practice of raahui will perform the appropriate karakia (traditional incantations). There are many incidents where kaumaatua have been called upon to perform karakia to expedite the recovery of the body. This is a key reason why a raahui is imposed, to focus on the recovery the body. If one continues to fish and partake of the food resource it shows disrespect for the bereaved family and a lack of cultural understanding. Karakia will also be performed to end the raahui by lifting the tapu (sacredness) and to make the area noa (free from tapu).

Many cultures practice their own form of raahui. Additionally, in a recent case of a drowning, it was the local Pakeha residents that asked Maori to impose a raahui. A key outcome of this bylaw is educating people to understand the significance of raahui and the notion of kinship with nature.

Regulation 22 of the Waikato-Tainui (Waikato River Fisheries) Regulations 2011 provides for the Trust to propose bylaws to restrict or prohibit the taking of fisheries resources for cultural reasons, such as the occurrence of a human death in the Waikato-Tainui Fisheries Area.

This bylaw recognises the traditional practice of closing an area to fishing in the event of a death on the river, particularly where the deceased is still to be recovered. Under this bylaw the Trust will impose the raahui at the direction of local kaumaatua and Waikato River Kaitiaki.

The closure would not be permanent but rather allow cultural matters to be addressed as a result of a drowning.

Bylaw 3 – Seasonal Raahui - Seasonal closure prohibiting the commercial harvesting of eels any eels from specific streams and rivers of the Whangamarino wetland during the tuna heke (eel migration) from 1 March to 31 May.

Objective

- To recognise and give effect to the traditional management practice of raahui
- To increase the number of eels able to migrate out of Lake Waikare and the Whangamarino wetland
- To recognise the cultural importance and RAMSAR status of the Whangamarino wetland

Explanation

This bylaw will prohibit commercial harvesting of eels within specific tributaries of the Whangamarino Wetland during the tuna heke (downstream migration) from 1 March to 30 May annually.

The Whangamarino wetland is designated as internationally significant RAMSAR wetland.¹

The Whangamarino was once an area that provided a multitude of food resource for Waikato-Tainui that included eels and other fish, shellfish and waterfowls. The Whangamarino, Maramarua and Lake Waikare were renowned for their Pa Tuna² and abundance of eels. The local hapu Ngaati Hine consider Lake Waikare and the Whangamarino wetland a taonga and a waahi tapu.³

The Whangamarino wetland and Lake Waikare was once the most productive eel fishery in the lower Waikato. Throughout the 1970s and up until the late 1980s, Lake Waikare and surrounding catchment was considered a significant eel fishery of the Waikato. The draining of the wetlands for agriculture and the over exploitation of eels have contributed to the decline of this once bountiful fishery.

¹ National Wetland Trust www.wetlandtrust.org.nz

² Traditional eel fishing grounds

³ Aareka Hopkins. A Ngaati Hine perspective on changes in ecology and water quality of Lake Waikare, found in Collier, Hamilton, Vant & Hoard-Williams (2010). The Water of the Waikato – Ecology of New Zealand’s longest river. Environment Waikato and the Centre for Biodiversity and Ecology Research (The University of Waikato).

The Waikato-Tainui Environment Plan provides for mechanisms to prevent fishing during the eel migration and spawning run as a means to protect and enhance taonga species such as eels, and to enhance recruitment of eels by increasing the number of eels that reach spawning maturity.

A raahui in terms of conservation is used to protect and restore products of the land and water, in particular where there is a decline in the resource or during a period associated with spawning. A recent case was the decline in pipi in Hauraki where a section 186A Temporary Closure⁴ was imposed to enable the stocks to rebuild.

Regulation 22 of the Waikato-Tainui (Waikato River Fisheries) Regulations 2011 provides for bylaws to increase the availability of a species of fisheries resource in a particular area in the Waikato-Tainui Fisheries Area.

The intention of this bylaw is to annually close specific tributaries to commercial eel fishing for three months during the tuna heke (downstream eel migration) between 1 March and 31 May. This proposal will continue to allow commercial fishers to take eels from the tributaries outside the closed period whilst safeguarding downstream migrants at the peak of the migration. The closure will provide eels from the catchment an increased chance of joining the spawning population. This bylaw represents a compromise that balances continued utilisation of the resource with conservation to ensure sustainability.

Bylaw 4 – Bylaw 4: Minimum weight for commercially harvested eels.

No commercial fisher may take or possess any shortfin eel taken within the Waikato-Tainui Fisheries Area weighing less than 300 g.

No commercial fisher may take or possess any longfin eel taken within the Waikato-Tainui Fisheries Area weighing less than 400 g.

Objective

- Improve recruitment to the eel fishery
- Increase the yield of commercially harvested eels

Explanation

The objective of this bylaw is to enhance the eel fishery by improving recruitment and increasing the proportion of eels that reach sexual maturity. This bylaw is consistent with the Waikato-Tainui Environment Plan which proposes to increase the minimum size of commercially harvested eels from 220g to at least 300g for shortfin eel and 400g for long fin eel. This bylaw will ensure an increase in yield per recruit i.e. increase harvest weight for the

⁴ Section 186A Temporary Closure, Fisheries Act 1996

same number of eels. This will also enable eels that are less than the minimum size to reach a reasonable size at harvest.

Bylaw 5 – Maximum weight for commercially harvested eels

No commercial fisher may take or possess any eel taken within the Waikato-Tainui Fisheries Area weighing more than 2 kg.

Objective

- Increase the proportion of shortfin and longfin female eels that reach spawning maturity
- Improve the overall size structure of shortfin and longfin eels
- Increase the number of large eels to predate small pest fish

Explanation

The Conservation status of New Zealand freshwater fish (2009) describes the threat status of longfin eels as ‘At Risk and Declining’.

The abundance of commercial-sized eels has declined in the past two decades, along with the proportion of longfin eels. Loss of habitat and over fishing are main reasons for this decline. Longfin eels are one of five threatened fish species that exist across parts of the Waikato River catchment.

Recreational and customary use has decreased as their abundance and the proportion of larger eels have declined. Areas intensively fished over a long period are less likely to hold a significant number of longfin female eels. Generally eels are not a productive species and a precautionary approach to their management is warranted.

The Waikato-Tainui Environment Plan seeks a reduction in the maximum size for commercially harvested longfin eels from 4 kilograms to 2 kilograms. Sufficient spawner escapement, together with habitat restoration is critical to maintaining a viable eel fishery into the future. Tribal and community initiatives are being funded by the Waikato River Settlement Clean Up Trust to restore fisheries habitat throughout the Waikato River catchment.

The purpose of a maximum size limit is to ensure that female eels that reach sufficient breeding size cannot be harvested. A reduced maximum size limit from 4 kilograms to 2 kilograms aims to increase the proportion of eels of breeding size. These larger eels if allowed to breed will eventually improve recruitment to the eel fishery. This is especially important to the endangered endemic longfin eel.

Fecundity estimates in migrant eels show that egg count increases with total length and total weight i.e. a female longfin eel of 4 kilograms in weight is likely to carry approximately 8 million eggs, whereas a female longfin eel of 2 kilograms is likely to carry 3.5 million eggs. The range in age a female eel takes to reach reproductive maturity can vary between 9-41 years for female shortfin and 27-61 years for female longfin. Depending on growth rates, eels of both sexes and species may migrate at younger ages. This length of time before eels reach maturity

and migrate exposes them to capture or being killed by non-fishing activities (e.g. drainage clearance, pollution events).

The commercial eel industry, to their credit, voluntarily returns longfin female migrants to the water even if they weigh less than the existing maximum limit.

Freshwater fisheries monitoring performed by the Waikato Regional Council has shown a paucity of large female eels in wadeable streams and rivers. Large eels are crucial to ensure a viable population and adequate recruitment. A 2 kilogram size limit is close to the maximum size a shortfin female migrant will grow. Longfin females grow much larger and will benefit more under this proposal. Although shortfin eels are less threatened than longfin, this bylaw will improve recruitment to both eel species. This bylaw also aims to increase the number of large eels able to fulfil their natural roles of top predator. These large eels can assist to aid the return of Waikato River and lake fish communities to more natural conditions by preying on small pest fish.

Consistent with this bylaw, the issuing of whakaaetanga (customary authorisations) by Waikato River Kaitiaki for customary fishing will stipulate a maximum size limit of 2 kilograms for both eel species.

The current maximum size limit for both species of eel is 4 kilograms, but very few eels larger than 2 kilograms are caught at present within the Waikato-Tainui Fisheries Area. It is expected that the impact on commercial fishers of not harvesting the largest and most fecund (egg producing) female eels would not be unduly substantial. Very few shortfin female eels grow larger than 2 kilograms. Reducing the maximum size would have almost no immediate or significant effect on the commercial catch in fished areas of the Waikato-Tainui Fisheries Area due to the lack of abundance of eels weighing 2 kilograms or more. However in the long term, large longfin eels are expected to increase to a point where some sustainable harvest may occur. In addition, retaining large eels in the Waikato River catchment, particularly lakes, may suppress juvenile pest fish such as koi carp and rudd.

The argument that the bylaw will simply increase the number of eels killed for just the same catch assumes that there is a significant number of eels currently being taken that are greater than the recommended 2 kilogram maximum size. However, the Waikato-Tainui Fisheries Area is the most heavily fished area in the country and does not have a large abundance of eels greater than 2 kilograms. Very few eels reach 2 kilograms in weight within the Waikato-Tainui Fisheries Area.

Bylaw 6 – Prohibition on taking of female migrant longfin eels.

No commercial fisher may take or possess any female longfin eel taken within the Waikato-Tainui Fisheries Area that is in the migratory morphological phase.

Objective

- Improve recruitment to the eel fishery
- To increase the number of longfin eels able to migrate and spawn

Explanation

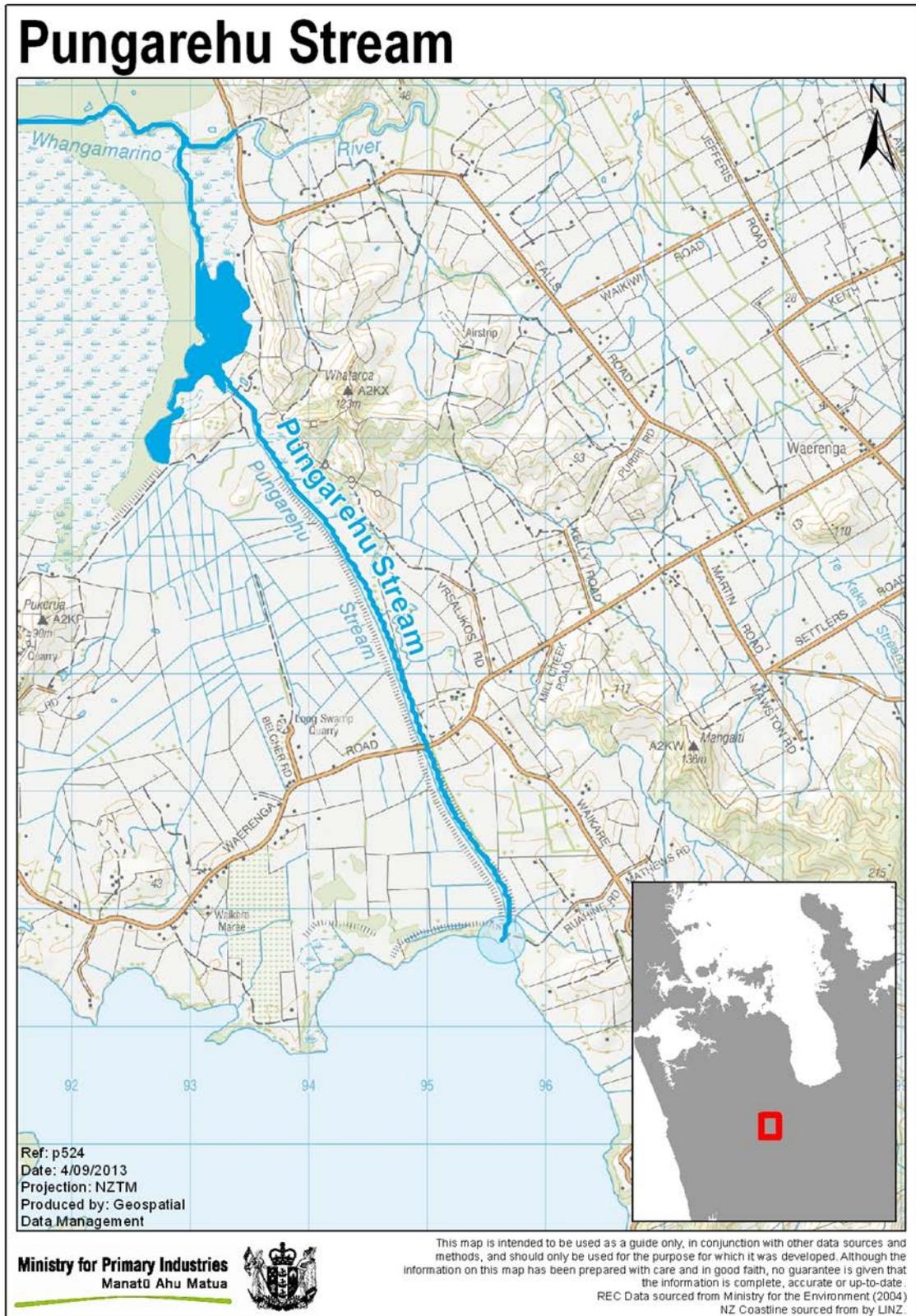
This bylaw will ensure that any female longfin eel showing morphological signs of migration would have a level of protection and be provided with every opportunity to make it to the ocean.

This bylaw is consistent with the Waikato-Tainui Environment Plan in particular objective 2 and policy 4 - taonga species are protected, restored, enhanced and managed, consistent with the tikanga, kawa and matauranga of Waikato-Tainui in order to give effect to the exercise of mana Whakahaere.

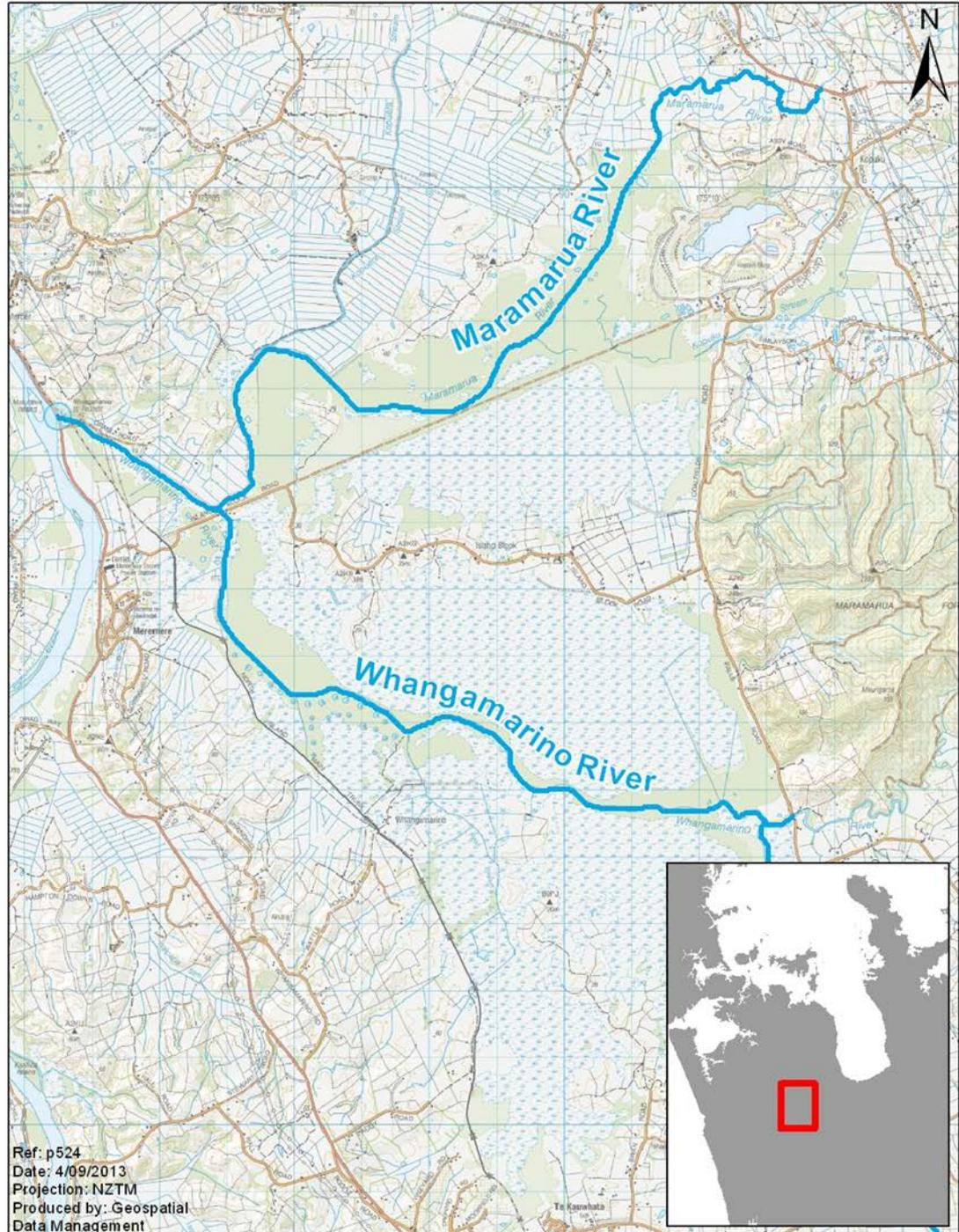
The intent of this bylaw is to ensure that female longfin eels that reach the spawning phase cannot be harvested. These migrant longfin eels if allowed to breed will eventually improve recruitment to the longfin eel fishery. This is important for the endangered endemic longfin eel.

The Trust has deliberately chosen to not permanently close large areas to commercial eel fishing. This is to ensure that commercial eel fishing is not unduly affected and to ensure there is no increased fishing pressure outside of a closed area.

Maps (Bylaw 3)



Maramarua and Whangamarino Rivers



Ref: p524
 Date: 4/09/2013
 Projection: NZTM
 Produced by: Geospatial
 Data Management

Ministry for Primary Industries
 Manatū Ahu Matua



This map is intended to be used as a guide only, in conjunction with other data sources and methods, and should only be used for the purpose for which it was developed. Although the information on this map has been prepared with care and in good faith, no guarantee is given that the information is complete, accurate or up-to-date.
 REC Data sourced from Ministry for the Environment (2004)
 NZ Coastline sourced from by LINZ

Te Onetea Stream

