

Te Kāuru Upper Ruamāhanga Floodplain Management Plan

URRMAC Workshop 13 September 2021

Room for the river

Proposed Funding

Te Kāuru Upper Ruamāhanga Floodplain Management Plan

Te Kāuru FMP was adopted by Council on 25 June 2019, after extensive public consultation and a hearing process.

The Te Kāuru vision for the catchment is:

“A connected, resilient, prosperous and sustainable community, proud of its rivers, that is involved in managing flood risks in a manner that recognises local identity and protects, enhances or restores natural and cultural values”

URRMAC Workshop Topics

The two main topics for this workshop are:

1. Room for the River – Allowing the river more room to move before intervention
2. Funding – To put in place a catchment wide targeted rate



Giving the river more room – a National issue

The concept of giving the river more room is not isolated to the Te Kāuru FMP. Nationally, words such as: constrained, zombie rivers, confined, are used to describe the nations rivers.

River confinement in New Zealand is the result of both engineering works such as stop banks, intentionally focused on flood defence, and the slow creep of agricultural encroachment.

Nationally it is recognised that we need to start working with the rivers, giving them space to move and allow channel adjustments to prevent disaster.

Example of constraining a river over time



Canterbury floods



Key legislative and regulatory changes

- Amendment to the Resource Management Act to deliver faster regional water plans
- A National Environmental Standard to hold the line by controlling riskier practices
- A National Policy Statement based on Te Mana o te Wai sets new bottom lines for swimmability and water health measures
- Stock exclusion regulations and water take measurement
- Mandatory and enforceable farm plans



1. Te Kāuru Room for the River

The community's desire is to allow space and freedom for rivers so that they can behave naturally, while providing a degree of certainty and protection to neighbouring landowners. River management methods to achieve this can be:

- Using envelopes in the western rivers rather than holding them to fixed lines. This allows for the natural processes of bed scour/deposition and bank erosion/accretion associated with meander migration
- Using riparian planting of buffers in the western rivers and vegetated edge protection in the eastern rivers as the preferred edge protection method, and/or
- Minimising the frequency of interventions in the channel, and where intervention is necessary using good management practices to maintain a clear fairway and buffer



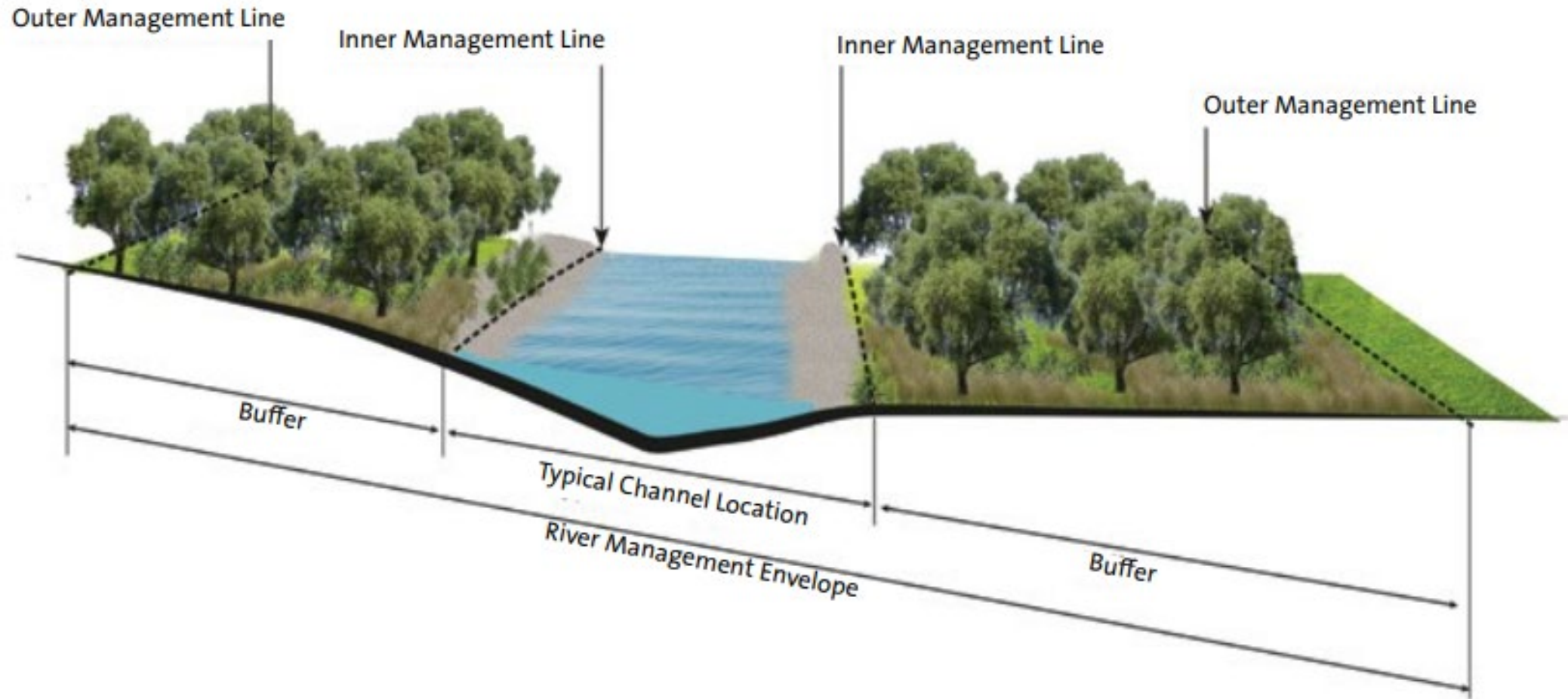
River Management Practice – Design lines

The design lines on the Western rivers are made up of inner and outer management lines (see page 15 of the FMP).

- The design lines have been in place since the early 1990s. They are also used in the Hawkes Bay, Bay of Plenty, Horizons and Canterbury.

They were established to support good river management practice and to give adjacent landowners a level of confidence and clarity about the maximum lateral extent to which the active river channel would be managed.

Example of Design lines



Design Lines

The **inner management lines** indicate the typical location of the active river channel.

The **outer management lines** provide the extent within which the river would be managed with a 20 year level of certainty (i.e. a major flood could erode outside of this). The area between the outer and inner management line defined as a buffer.

The river is free to move within the typical channel location bounded by the inner management lines and can also erode and occupy parts of the buffer subject to the Hierarchy of Intervention.

Te Kāuru Intervention wording

HIERARCHY OF INTERVENTION FOR THE WESTERN RIVERS

	SITUATION	INTERVENTION TYPE	ACTIVITIES	TIMEFRAME FOR COMPLETION
LOW RISK	Land in buffer is at risk of erosion	Limited intervention/monitoring of risk by staff	Only activities that will result in a low risk of adverse impacts (these will have the effect of limiting work in the wetted channel and in high-value riparian areas)	Scheduled regular maintenance (annual work programmes)
MEDIUM RISK	The outer management line is at risk of erosion	Moderate-priority intervention	Only activities that will result in low and/or medium risk of adverse impacts, or a limited amount of high-impact activities	Incorporated in annual work programmes
HIGH RISK	Risk to life Risk of damage to key infrastructure Erosion has occurred beyond the outer management line	Immediate intervention	All activities available – with low, medium and high adverse impacts	Urgent – to be completed ahead of programmed work that can be practically deferred to allow for the completion of priority, reactive work

This hierarchy is an effective way to align the risks of a situation with the potential adverse impacts of an intervention. In effect, it means that:

- Low-risk situations, such as minor erosion of land in a buffer where there is no critical infrastructure, can only be managed with activities that are not undertaken in the wetted channel
- High-risk situations, such as a breach of the outer management line or an immediate risk to critical infrastructure, can use all the available activities, including those undertaken in the wetted channel

Further developments of this guidance will recognise the need to maintain a degree of flexibility in dealing with different situations, while still providing enough direction to ensure a high degree of consistency and the achievement of agreed outcomes.

Examples of erosion

Over the last few weeks there have been a number of weather events that have caused erosion.

Each of these erosion sites have been assessed against the Hierarchy of Intervention outlined in the FMP.

Following are some examples of erosion. We will go through each of them and discuss the Hierarchy of Intervention and where we believe the risk sits.

Example 1 - Rural Waipoua River



The Landowner stated:

Top area

“The river is about to breach the outer management line and we have had a chunk of bank/previous rock work disappear down the river.”

Bottom area

“The bank has all gone and is now back to the white line. I have talked with Peter & Des about some pole planting in here on the grass.”

Example 1: Photos



Example 2: Ruamāhanga River

This next example is similar to the first one, with a few exceptions:

- There is a significant river alignment issue
- There is landowner infrastructure within the buffer (identified in Te Kauru)
- There are landowner conflicts (both sides of the river)

The landowner wishes the Council to attend and fix the erosion immediately as it is at risk of damaging their water intake.

Example 2: Photos



Example 3: Waingawa River





A take away note from the FMP

The expected outcome is that the rivers will be able to behave in a more natural way with a greater variety of form and habitat. However, this FMP acknowledges that:

- Interventions with machinery will still be needed in the river environment – and in some cases they will be significant (for example, to re-establish vegetated buffers after major damage)
- In other locations, regular work with machinery may still be the best way to achieve the FMP's overall outcomes where other methods are not effective
- While GWRC will be required to intervene with mechanical means less frequently in the western river channels, the overall scale of works will not necessarily be less

Communication

We are arranging a brochure for riverside landowners and a general public communication release, which will go into the local papers.

If anyone would be interested in getting involved in producing these brochures please let me know. Any input or suggestions are welcome.

2. Funding

Te Kāuru (pages 32 - 34) outlines the current funding structure and the proposed funding structure.





Funding

Landowners have funded a portion of the total river scheme costs, also known as targeted rates.

However, to recognise and reflect the wider benefits of this FMP, it is proposed that these targeted rates be funded by all ratepayers in the Te Kāuru Upper Ruamāhanga catchment.

This FMP proposes to spend money on major projects and general works that are not necessarily 'river scheme' based, and are a departure from the current river scheme approach of annual work programmes.



Funding change – what's involved

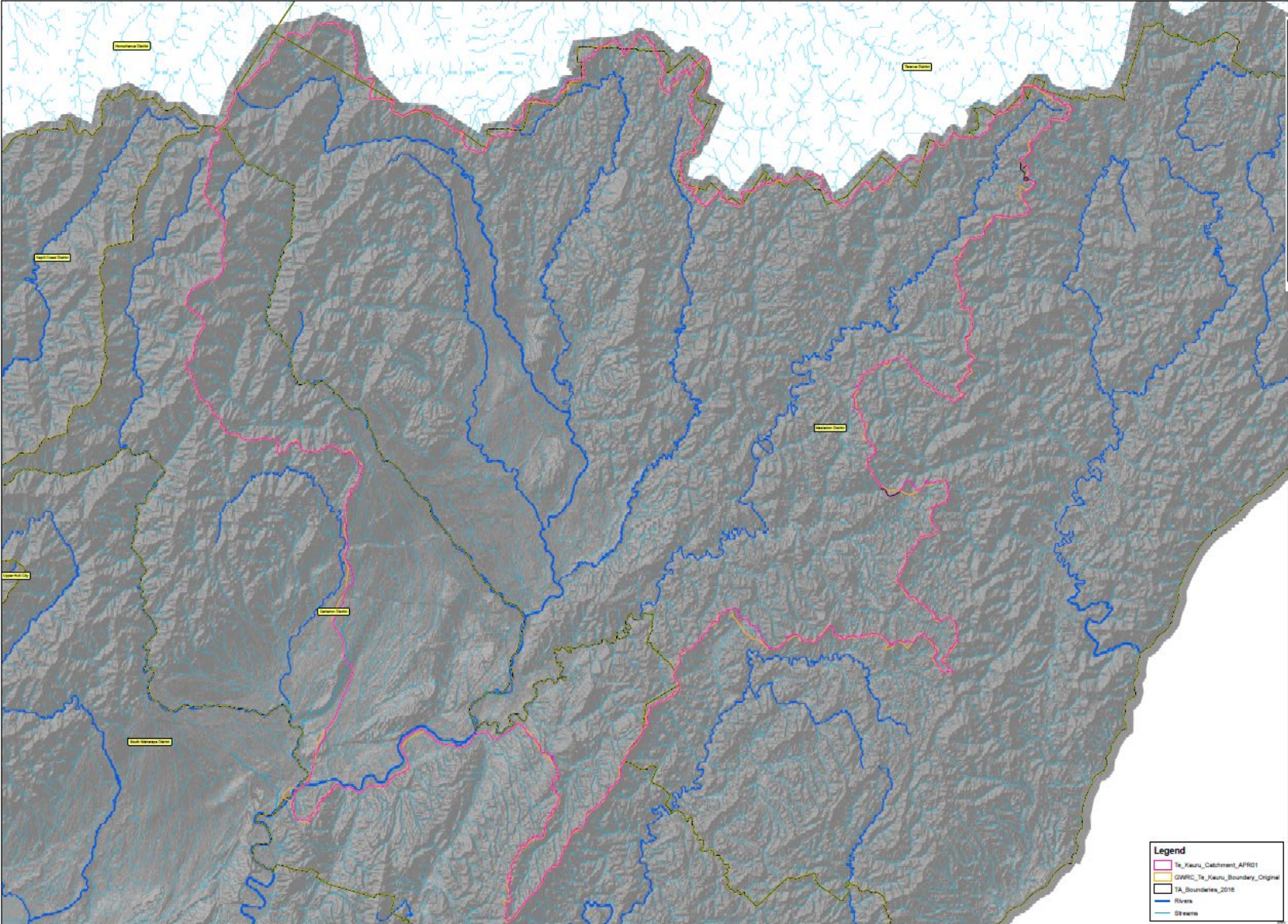
A review of the Revenue and Financing Policy (RFP) will be undertaken for the next Annual Plan (22/23).

The RFP describes how GWRC intends to fund its expenditure. It is the mechanism in which to put forward any rating changes for public consultation, which commences in March 22.

The work involved in putting the funding proposal forward for public consultation involves the following:

- Confirming the catchment
- Benefit analysis – a report outlining the 'why'.

Te Kāuru Catchment



Legend

- Te_Kauru_Catchment_APR01
- GWRC_Te_Kauru_Boundary_Original
- TA_Boundaries_2016
- Rivers
- Streams

GWRC

Legend

- Te_Kauru_Catchment_APR01
- GWRC_Te_Kauru_Boundary_Original
- TA_Boundaries_2016
- Rivers
- Streams

Southern section of Catchment



Criteria setting

When deciding what properties are within the catchment and what properties are not, we may need to consider the following:

- Are they already paying into another scheme?
- How much of their properties is within the catchment and what is the % cut off?
- Does the portion of the property within the catchment contain infrastructure that isn't covered by another scheme?
- What else should be considered?



Blue – Mangatarere scheme
Brown – Gladstone scheme