greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

TE KĀURU

UPPER RUAMĀHANGA PROPOSED FLOODPLAIN MANAGEMENT PLAN

SUMMARY FOR PUBLIC CONSULTATION

MARCH - APRIL 2019

CONTENTS

WE WANT TO HEAR FROM YOU

We are seeking submissions on the proposed Te Kāuru Floodplain Management Plan (FMP) . Submissions are open until 14 April 2019.

Your feedback is important.

This document has information on:

- What the issue is and why we need Te Kāuru
- What process did we take to get to this FMP
- How and why we're suggesting a change to our approach
- How we are going to implement it

You can download a full copy of the FMP and other supporting documents at **www.TeKauru.co.nz**

WHAT IS A FLOODPLAIN MANAGEMENT PLAN?

A floodplain management plan is a document that describes the approach to flood and river management over the next 30-40 years. It describes various types of responses that will be used for flood and erosion protection in a given catchment, including: structural works, river management, planning and policy, emergency management and environmental enhancement.

Submissions close
14 April 2019
followed by public hearings

This is your chance to be heard

WHAT'S THE ISSUE?

The Te Kāuru catchment includes the Upper Ruamāhanga River upstream of the Waiohine confluence, and its tributaries the Waipoua, Waingawa, Taueru, Whangaehu and Kopuaranga Rivers.

The catchment has a history of flooding. Flooding can be dangerous and cause damage to private property and community assets.

Processes for managing flooding and erosion have been in place in the catchment for some time. After working with community representatives we acknowledged our processes could do more to reflect wider local values and we want to take a long-term view of managing the whole catchment's flood and erosion issues.

WHY DO WE NEED TE KĀURU?

A long-term plan for managing the Te Kāuru catchment, including prioritisation of major projects and catchment wide projects to manage the flood and erosion risks

More even distribution of ratepayer-funded works

Continued provision of flood hazard management and erosion protection for land beyond the buffers

Enhancing environmental and cultural values of the rivers by allowing greater expression of natural river processes, where possible, and attempting to minimise the amount of works within the stream

THE PROCESS

THE PROCESS FOR DEVELOPING THIS FLOODPLAIN MANAGEMENT PLAN HAS INVOLVED THREE PHASES:

Phase 1:
Establish the context; define the values, issues and objectives; identify the flood hazard; collect information

Phase 2:
Identify, assess and select management options through the Te Kāuru Subcommittee

Phase 3:
Prepare Floodplain Management Plan
Achieve sustainable solutions

The approach used to identify, assess and select management options during Phase 2 has been developed with the FMP Subcommittee and has responded to the complexity and scale of the Upper Ruamāhanga catchment as required. See table below.

Management approaches (common methods and major project responses) were considered using a simplified Multi-Criteria Analysis (MCA) to test potential floodplain management options against the over arching Te Kāuru aims and associated values and identify areas to improve their performance towards these aims and values. The questions outlined in the table below were tested for each of the approaches within the Te Kāuru FMP.

Preferred management approaches were presented to the community through four rounds of public engagement and are now being consulted on with the community and wider public as a proposed FMP.

APPROACH USED TO IDENTIFY, ASSESS AND SELECT MANAGEMENT OPTIONS

ECONOMIC	Is it affordable (now and into the future)? Does it reduce likelihood of loss to private property, business or agriculture? Does it enhance wider economic opportunities?
RESILIENT COMMUNITIES	Is it adaptable to change? Does it manage or reduce the risk to essential public infrastructure? Does it protect the health and safety of the community?
CULTURAL	Are cultural values recognised? Does it recognise the interconnectedness of natural systems?
NATURAL SPACES / PROCESSES	Does it improve natural values / character? Does it improve natural processes / ecology?
COMMUNITY NEEDS / AMENITY	Does it improve river access? Does it improve recreation safety? Does it respond to community aspirations?

OUR VALUES

Rivers are the lifeblood of our community, in fact the name Wairarapa means 'glistening waters'. However, sometimes our greatest assets can cause our biggest risks.

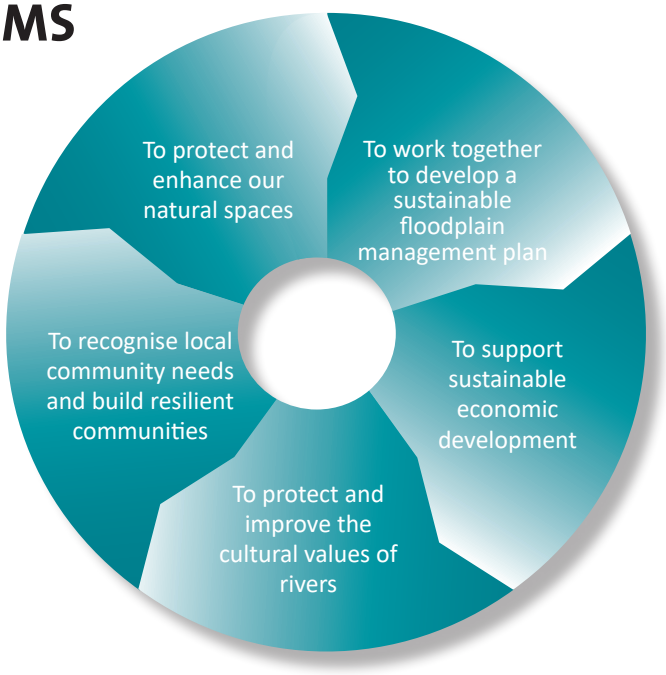
The rivers that make up the Te Kāuru catchment have a diverse range of values attributed to them. Such values are reflected in the natural character of the rivers and contribute to our social, economic and cultural well-being. Throughout the Te Kāuru catchment, specific values recognised include: contribution to identity and livelihood; sustaining health and wellbeing; recreation values; and provision for food and resources.

With the help of community representatives from Masterton District Council, Carterton District Council, Ngāti Kahungunu ki Wairarapa, Rangitāne o Wairarapa, and the wider community (through the Te Kāuru Upper Ruamāhanga Floodplain Management Plan Subcommittee) we identified the following values for the catchment:

OUR VISION

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

OUR AIMS



THE TE KĀURU APPROACH

The approach outlined in the proposed FMP will allow rivers more space to flow naturally within the channel and defined buffer. It will mean people who own land or live alongside rivers will have a level of certainty, and protection from erosion outside of the buffers. However, there may be erosion to their land within the buffers from time to time.

It's important to remember Te Kāuru outlines a long-term approach to flooding and erosion issues. Plans could take decades to implement and changes won't be visible right away.

As Te Kāuru seeks to recognise a wide range of the community's values in how we manage the rivers, we are also proposing to spread the share of the local costs of river management works across the wider community. Te Kāuru outlines how this change in costs may work.

RESPONSES AND METHODS

There are two distinct kinds of river schemes operating within the Te Kāuru catchment, the western rivers and the eastern rivers. The western rivers are the large, gravel-bedded rivers, where as the eastern rivers are the smaller silt-bedded rivers.

Due to the large area Te Kāuru covers, and the different types of land use and rivers, a combination of flood and erosion management responses have been developed.

We use categories for the types of response we're proposing to implement:

VALUES, ISSUES AND RESPONSES

The values, issues and responses directly relating to specific locations within the Te Kāuru catchment are set out in Part 2 of the FMP which includes methods and responses to these issues.

Site specific and common methods that are proposed for use across the whole catchment are:

Structural

Structural responses encompass the development of structures and other physical works designed to keep flood waters away from existing development. New structural methods, such as stopbanks, are not included in the common methods as they are part of a site-specific or major project response.

River Management

- Code of Practice
- River edge envelope (buffers)
- River bed level monitoring
- Gravel extraction and analysis
- Riparian planting of buffers
- Mixed riparian planting within buffers
- Pest management in riparian planted buffers
- Pool, riffle, run envelope
- Historic channel lines
- Isolated works support
- Alternative land-uses within riparian planted buffers

Planning and Policy

- Land-use controls
- Designations
- Flood hazard maps
- Rural stopbanks policy
- Scheme funding decision making policy
- Abandonment/Retirement of assets
- River management access
- Strategic land purchase
- Protection against deforestation in upper catchment

Emergency Management

- Community resilience
- Flood forecasting and warning system

Environmental Enhancement Responses

- Environmental strategy
- Community Support Officer
- Riparian management officer
- Care groups and clubs

CATCHMENT WIDE PROJECT RESPONSES

Below is a table of the proposed general responses which will be implemented. More information on each of the responses can be found within the corresponding section of the FMP is listed below.

GENERAL RESPONSES SUMMARY

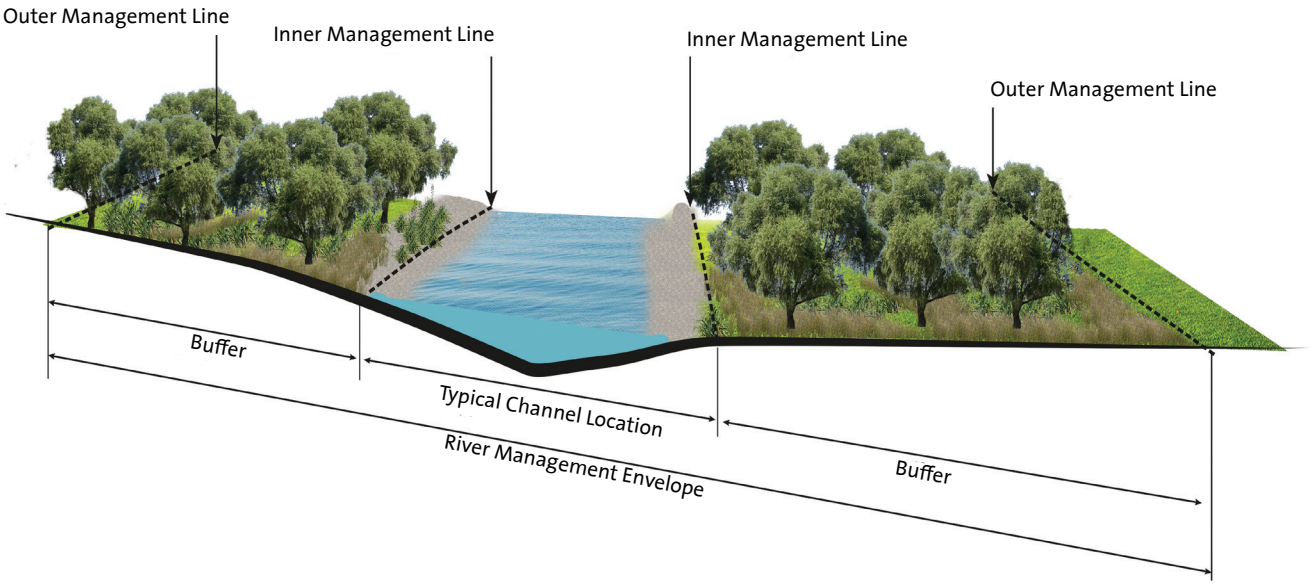
ACTION	SECTION REFERENCE
Ongoing river management work	n/a
Develop bed level envelopes for Waipoua, Waingawa and Ruamāhanga Rivers	3.2.3
Riparian planting of buffers	3.2.5
Develop pool, run and riffle envelopes	3.2.8
Wairarapa Combined District Plan Review	3.3
Operational expenditure	3.3.5
Strategic land purchase and asset retreat	3.3.8
Emergency management and flood warning improvements	3.4
Develop Environmental Strategy	3.5.1
Community support officer	3.5.2
Riparian management officer	3.5.3
Governance	4.1
Funding structures	4.3
Design lines review	4.4.2
Pest plant and animal management	4.4.2
Major review of FMP	4.4.7

A REVISED BUFFER MANAGEMENT APPROACH

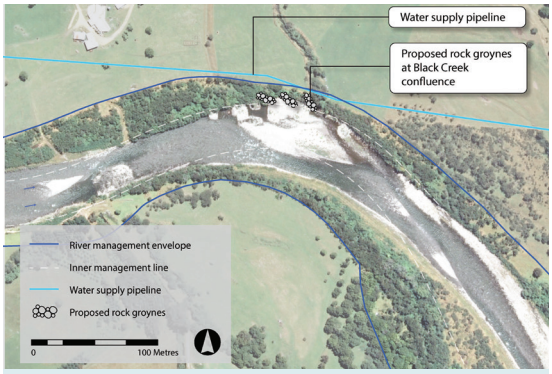
Te Kāuru outlines a shift in approach to the management of buffers and is proposing to give the river more space to carry out its natural processes. Buffers are the area between the inner and outer management lines. The current expectation is that the river will be managed to keep it within the inner management line, which means that in many cases people are using land right up to the river's edge.

The approach in the Te Kāuru FMP is to allow the river to move within the whole buffer. Riverside landowners will still get a level of protection from river erosion outside of the buffer, but will be encouraged to accept erosion of land within the buffer from time to time. Te Kāuru also proposes to plant the buffers with mixed vegetation of willows and natives to help reduce the amount of erosion to the buffers. In many places this planting has already occurred, the common method to plant all the buffers in Te Kāuru will ensure all the riverside land is being treated equally.

The Te Kāuru FMP also indicates that where possible retreat or removal of assets out of the buffer should occur. It is expected that this shift in approach will mean there will be less intervention and will see improved practices of management to minimise environmental impacts to the river. A report on the benefits and risks of this buffer management approach by Professor Russell Death is available at www.tekauru.co.nz.

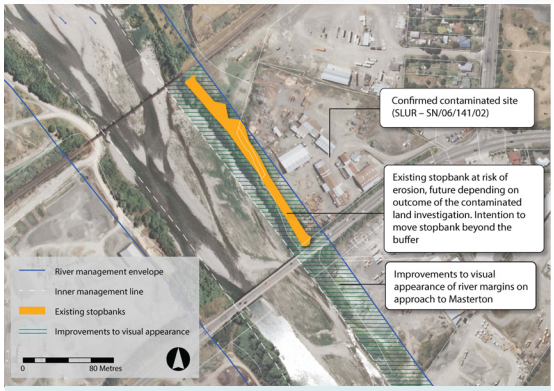


MAJOR PROJECT RESPONSES

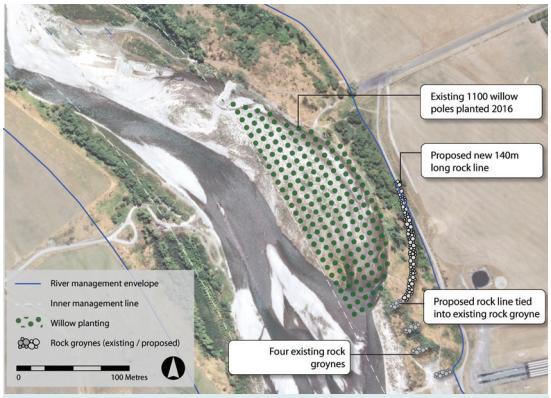


	MDC WATER SUPPLY
MANAGEMENT MEASURE	Increase bank protection to river edge at Black Creek
PRIMARY REASON FOR RESPONSE	To increase protection to water supply pipeline
PRIORITY	Low
COST	Up to $300,000
FUNDING	Capital funding TBC

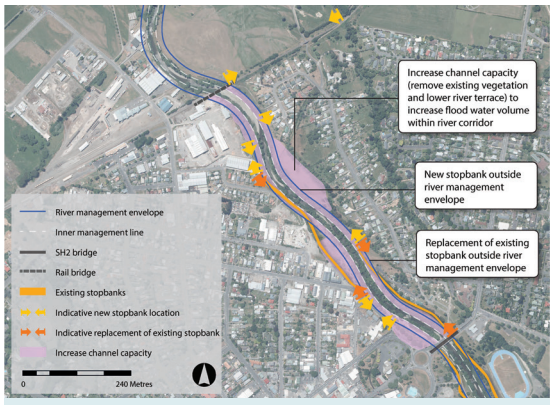
	MDC WATER SUPPLY
MANAGEMENT MEASURE	Targeted operational river management with revised emergency management plan
PRIMARY REASON FOR RESPONSE	To manage risk of erosion posed to the water supply pipeline
PRIORITY	High
COST	Varying but of magnitude of $5-20,000 per annum generally, with allowance for targeted emergency works as required
FUNDING	Operational funding



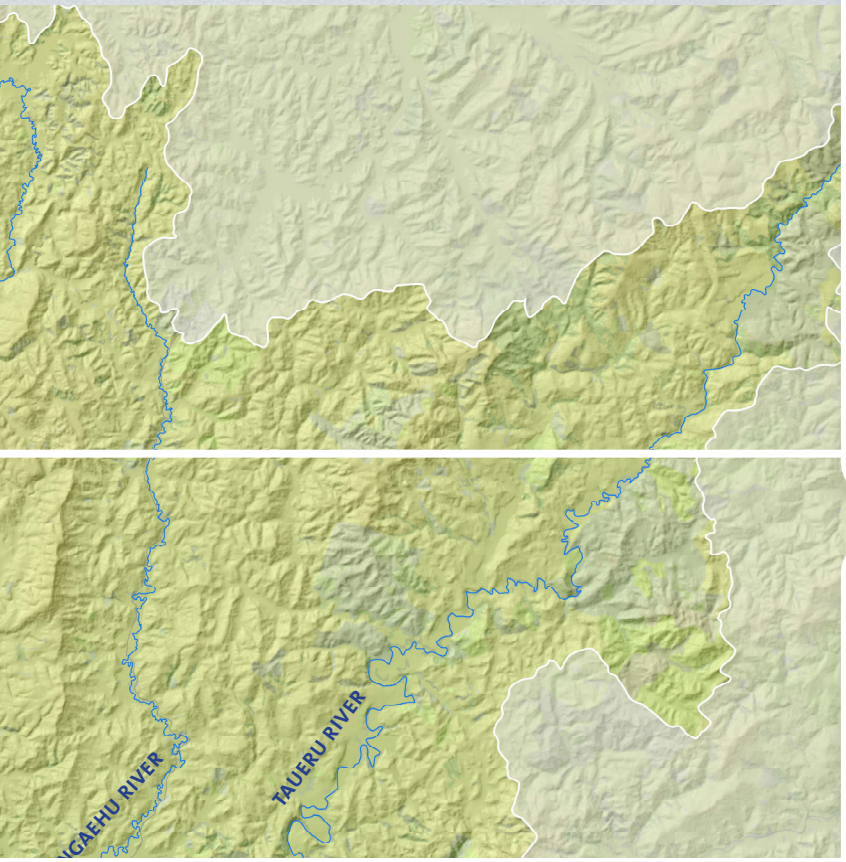
	SOUTH MASTERTON STOPBANK AND URBAN GATEWAY
MANAGEMENT MEASURE	Contaminated site assessment, visual improvements within the buffer, establishment of public access to the river
PRIMARY REASON FOR RESPONSE	Appealing gateway to Masterton, recreational access and contaminated site management.
PRIORITY	Medium
COST	$100,000 for contaminated site assessment
FUNDING	Capital funding TBC



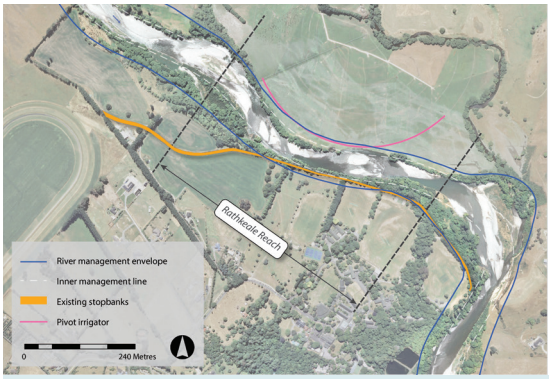
	HOOD AERODROME
MANAGEMENT MEASURE	Rock line connecting terrace with existing rock groyne at the end of the runway
PRIMARY REASON FOR RESPONSE	To increase protection to the runway and avoid any contaminated material being eroded into the river.
PRIORITY	Low
COST	$755,000
FUNDING	Capital funding TBC



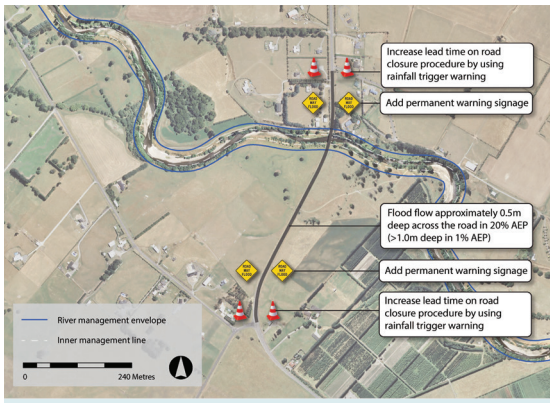
	WAIPOUA URBAN REACH
MANAGEMENT MEASURE	Increase channel capacity and upgrades to existing stopbanks
PRIMARY REASON FOR RESPONSE	To increase current and future flood protection to urban area of Masterton.
PRIORITY	High
COST	Stage 1 $350,000
FUNDING	Capital funding TBC



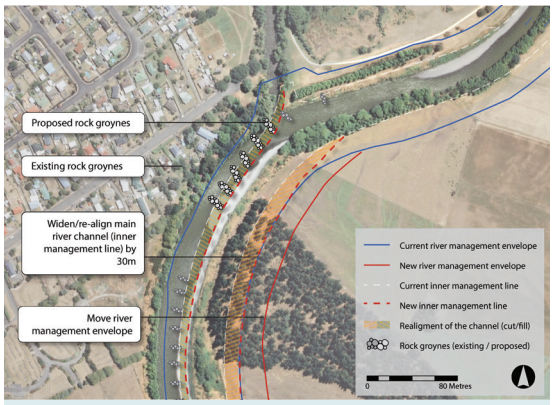
Major Project Responses have been developed in locations where flood and erosion issues cannot be managed by normal application of the common methods alone.



	RATHKEALE COLLEGE STOPBANK
MANAGEMENT MEASURE	TBC
PRIMARY REASON FOR RESPONSE	To increase flooding protection to Rathkeale College and reduce erosion risk to stopbank and Rathkeale College
PRIORITY	Medium
COST	$1,000,000 TBC
FUNDING	Capital funding TBC

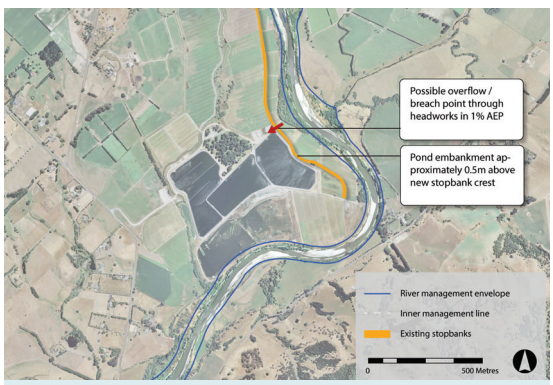


	PAIERAU ROAD
MANAGEMENT MEASURE	Permanent warning signs and improved flood forecasting
PRIMARY REASON FOR RESPONSE	To increase the safety of road users by providing permanent warning signs and increasing lead time for road closure to 2.5 hrs.
PRIORITY	Medium
COST	$20,000
FUNDING	Capital funding TBC



	RIVER ROAD PROPERTIES
MANAGEMENT MEASURE	Increase bank protection to river edge at River Road and widen river channel
PRIMARY REASON FOR RESPONSE	To increase protection to River Road, Masterton
PRIORITY	High
COST	$575,000
FUNDING	Capital funding TBC

	RIVER ROAD PROPERTIES
MANAGEMENT MEASURE	Easements and other legal costs as required
PRIMARY REASON FOR RESPONSE	To allow construction/maintenance of groynes and widening of the river
PRIORITY	High
COST	$50,000
FUNDING	Capital funding TBC



	HOMEBUSH WASTE WATER TREATMENT PLANT
MANAGEMENT MEASURE	Resilience works within headworks facility (plinth for generation, raising electrical works).
PRIMARY REASON FOR RESPONSE	To increase resilience of HWWTP headworks in case of stopbank overtopping.
PRIORITY	TBC
COST	$50,000
FUNDING	Capital funding TBC

MASTERTON URBAN AREA

We have considered a range of approaches for how we mitigate impacts of future floods, including upstream storage and the purchase of properties at risk. Both of these options had significantly higher costs (greater than $30million) and as a result were not considered further.

Increasing the capacity of the river channel and improved stopbanks was agreed as the most viable option, supported by non-structural responses such as encouragement of wetland establishment upstream. The increased channel capacity is being considered in order to minimise stopbank heights but it will have a temporary medium-term impact on the look and feel of the river channel and berms. A staged approach has been developed to assist with managing affordability.

Te Kāuru outlines a staged approach which will allow us to simultaneously take a closer look at our existing assets and better understand the flood risk. Various designs will be considered in collaboration with the local community to ensure sustainable and affordable outcomes. At the end of each stage an assessment will be made of whether to proceed to the next stage, and what the scope of that stage will be.

MASTERTON URBAN AREA - STAGED APPROACH TO IMPLEMENTATION

STAGE	PROPOSED RESPONSES	TIMEFRAME	ESTIMATED PROVISIONAL COST
1	**INVESTIGATION AND OPTION CONSIDERATION** 1. Further understand the risk of flooding including detailed geotechnical investigation of the existing stopbanks and installation/upgrading flow sites on the Waipoua River 2. Develop the design of the preferred management approach, consider options for and potential locations of new or existing stopbanks. Work with the community to consider the level of risk with each option, and consider cost implications of the various options 3. Community preparedness 4. Land use change and land purchase	OVER NEXT 2 YEARS	$350,000
2	**REDUCE FLOOD RISK IN HIGH PRIORITY AREAS (OXFORD ST)** 1. Design and construct 1% AEP flood risk management improvements 2. Develop and implement asset management plan	BETWEEN 2 – 5 YEARS	$8,000,000 Costs are provisional only and will be refined during Stage 1
3	**REDUCE RISK IN ALL CURRENT 1% AEP FLOOD SENSITIVE AREAS (AKURA RD)** 1. Design and construct 1% AEP flood risk management improvements 2. Develop and implement asset management plan	BETWEEN 2 – 10 YEARS	$4,500,000 Costs are provisional only and will be refined during Stage 1
4	**REVIEW PROCESSES AND UNDERSTAND FURTHER FLOOD RISK** 1. Review and update information 2. Whole of life asset management	ONGOING FOR THE NEXT 10 – 20 YEARS	Costs to be confirmed nearer the time, but estimated to be approximately $150,000
5	**REDUCE RISK AS A RESULT OF CLIMATE CHANGE** 1. Design and construct 1% AEP + climate change flood risk management improvements 2. Update asset management plan to incorporate 1% AEP with climate change improvements	20 – 30 YEARS	Costs to be confirmed closer to the time

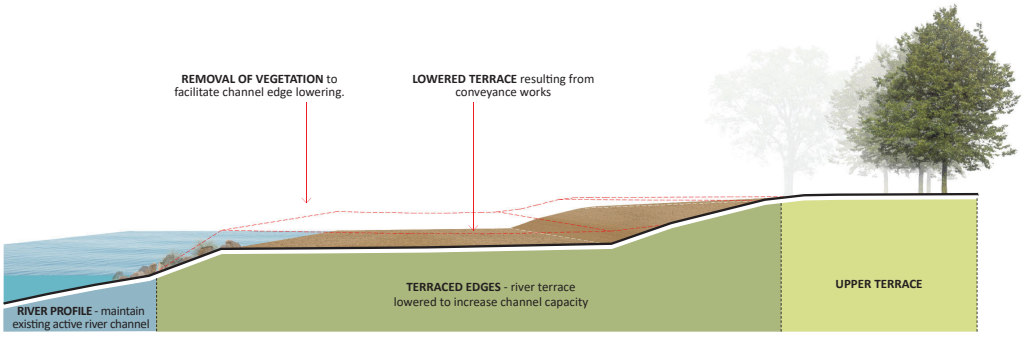
Increased Channel Capacity

The majority of riverside vegetation within the urban reach of the Waipoua River, between the rail bridge and the SH2 bridge would need to be removed. This would help achieve the greater channel capacity so the river area would change significantly in the medium term until new trees are established. In doing this, it also creates the opportunity to enhance the recreational and amenity values of the river corridor, including improved spaces for walking, running, cycling and other leisure activities.

EXISTING CONDITION

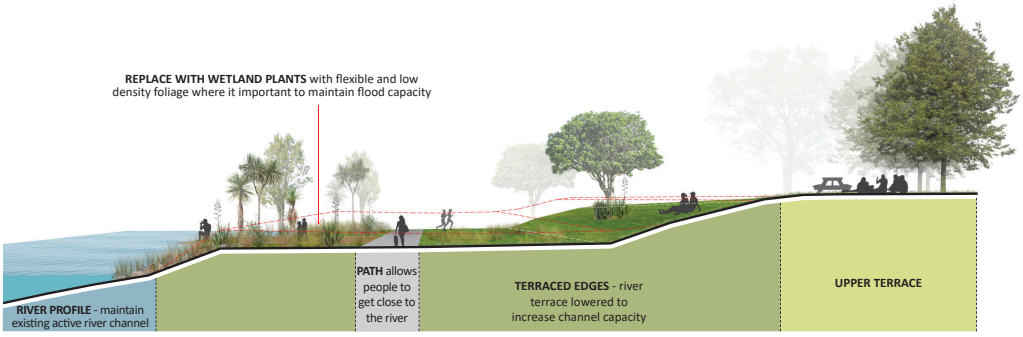
CHANNEL EDGE LOWERING
INDICATIVELY 3-5 years

INCREASE CHANNEL CAPACITY TO CONTAIN FLOOD WATER

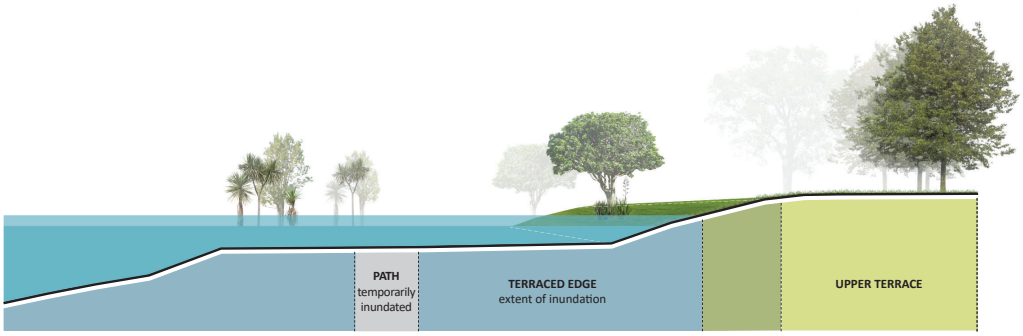


CHANNEL EDGE ENHANCEMENT
INDICATIVELY 5-20 years

FOLLOWING LANDSCAPE REHABILITATION



1% AEP FLOOD WITH CLIMATE CHANGE
FUTURE

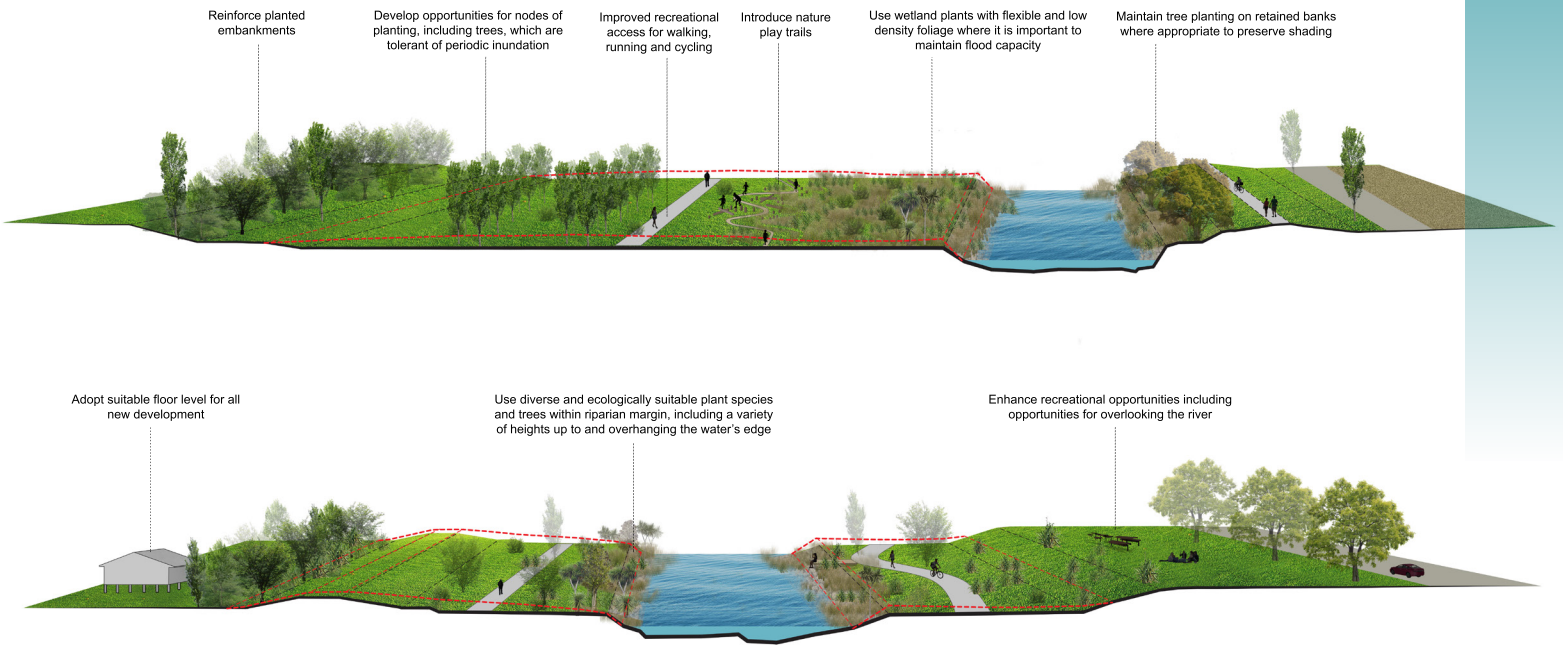


Potential Structural Improvements

The construction of new structural measures will give us more confidence in the performance of the flood risk management scheme. Where practicable, these measures would utilise the natural form and features of the river to increase the level of flood protection to people, property and infrastructure. It will also enhance the spaces within the river corridor to align with community aspirations and allow the river to move naturally.

Making room for the river within the Masterton urban reach of the Waipoua River is consistent with other floodplain management responses throughout the Te Kāuru FMP. The planting and vegetation regime within the urban reach will need to be carefully managed to ensure the conveyance capacity between upgraded stopbanks is not compromised and is in line with the values and aims of the FMP and community that recognise the river as an integrated part of the town.

RIVER CORRIDOR PROPOSAL



IMPLEMENTING TE KĀURU

The approaches, catchment wide responses, and major project responses within the Te Kāuru FMP are planned to be implemented over the next 30 to 40 years. Section 4 of the proposed FMP outlines priorities for each of the outcomes and estimated timeframes.

Governance

The governance structure for implementing Te Kāuru proposes that a formal Advisory Committee be established to oversee the implementation of the Te Kāuru FMP. Existing river schemes committees would continue to operate as they have done. In time, these committees may evolve to include members from additional community groups within the catchment. The scheme committees will be renamed as 'river management groups'.

The Advisory Committee will be made up of six representatives from river management groups within the Te Kāuru area (including one from within the eastern scheme areas). It will also include two representatives from Carterton District Council, three from Masterton District Council, two from Greater Wellington Regional Council (GWRC) and two iwi representatives.

The river management groups would report up to the Advisory Committee and in turn appropriate GWRC committees. The Advisory would meet more frequently than the scheme committees do (perhaps quarterly) in the early stages on Te Kāuru implementation.

Funding

There are significant costs associated with the proposed responses in Te Kāuru. A change from the current funding structure is proposed for the implementation of Te Kāuru. Currently, landowners within the schemes fund a portion of the total scheme rates. Funds also comes from a regional rate, infrastructure owner direct contributions, and other (such as gravel royalties or reserve interest). However, to recognise and reflect the wider benefit of implementation measures, it is proposed that landowner contributions be spread over a wider rate base (for example, all ratepayers in the Te Kāuru catchment).

Costs

The benefits sought from this FMP include flood hazard and erosion protection, and enhancing environmental and cultural values of the river. These aim to benefit the wider community and the environment. The costs involved in this FMP relate to three separate changes or increases to rates: spread of the targeted rate, increased operational expenditure through general responses, and new capital expenditure through major projects. The increases in rates estimated are for the 'local share' as well as the increase in regional portion. These are based on the current model of the regional share being up to 50%. Therefore local share, collected through a targeted rate, is approximately half of the associated costs, but how they are distributed across ratepayers will vary.

A rate increase for all operational activities has been estimated at $13 per $100,000 of Capital Value (CV). A rate increase for the major project responses (including up to Stage 2 of the Waipoua major project response) has been estimated to equate to a rates increase of approximately $10 per $100,000 of CV.

The timing of rate increases are estimated to be:

- 1-2 years – approximately $2-3 per $100,000 CV
- 3-5 years – approximately $5-10 per $100,000 CV
- 6-10 years – approximately $10-23 per $100,000 CV

NEXT STEPS

Submissions are open now

Submissions close 14 April 2019

Public hearings

During the week starting 29 April 2019

Review of all submissions and public hearings process

Incorporate changes to the FMP as a result of the public consultation and hearings

Finalise and adopt the FMP

June 2019

Implement the FMP From July 2019

HOW CAN I GET MORE INFORMATION?

Dip your toes in the Floodplain Management Planning process…

COME TALK TO US

Bankside BBQ on
SATURDAY 30 MARCH AND SUNDAY 31 MARCH 2019

Where: Waipoua River bank north of State Highway 2 Bridge

When: 10.00 am – 2.00 pm

Wairarapa Farmers' Market on
SATURDAY 23 MARCH, 30 MARCH AND 6 APRIL 2019

Where: Farrier's car park at the northern end of Masterton

When: 9.00 am – 1.00 pm

Carterton Farmers' Market on
SUNDAY 24 MARCH, 31 MARCH AND 7 APRIL 2019

Where: Carterton Town Centre

When: 9.00 am – 12.30 pm

Car Boot Sale on
SUNDAY 24 MARCH, 31 MARCH AND 7 APRIL 2019

Where: Corner of Essex and Chapel Streets, Masterton

When: 7.30 am – 12.00 pm

FOR MORE INFORMATION

www.TeKauru.co.nz

PICK UP MORE INFORMATION FROM

Greater Wellington Regional Council or the Masterton or Carterton Libraries

REQUEST INFORMATION FROM

TeKauru@gw.govt.nz

HOW CAN I MAKE A SUBMISSION?

- Complete a submission form online at www.TeKauru.co.nz
- Email your submission to TeKauru@gw.govt.nz
- Fill in a submission form and post it back to us. Forms available at various events and from GWRC
- You can arrange a time to make an oral submission by contacting us on 0800 496 734

PLEASE NOTE THE FINAL DATE FOR RECEIVING SUBMISSIONS IS 14 April 2019

FREQUENTLY ASKED QUESTIONS

Why do we need a Floodplain Management Plan for the Upper Ruamāhanga?

Flood and erosion risks have, and continue to be, a big issue for people living on the Te Kāuru floodplain. Over time, work has been undertaken to help manage these risks in different ways throughout the current river scheme system. The Te Kāuru Upper Ruamāhanga River Floodplain Management Plan will bring all of this floodplain management work together into one complete plan.

It hasn't flooded here for ages, why do we need to do this?

From the data we have available, and the current information on climate change, it is predicted that there will be an increase in large flood events. There is potential for significant property damage and risk to life. We need to take a proactive approach to flood protection now, so that in the future we are less affected by large flood events.

I've already given you feedback, do I have to make a submission?

Thank you for providing us with feedback during one of our rounds of engagement. We have made many changes to the Te Kāuru FMP as a result of feedback we have received.

The submissions process is a more formal process and allows you the opportunity to speak to the hearings panel if you wish. Previously received feedback will not be relooked at, so we would encourage you to make a submission.

I am a riverside landowner, will I still have a say on how my river is managed?

Yes you will. The river schemes concepts will remain, however they will now be called River Management Groups and the flood protection schemes will operate within these. We will be encouraging river side landowners to remain or join these groups to continue to have input into the management of the rivers. Representatives of these groups will also form the Advisory Committee. In time, representation on these groups will evolve to include community members. You will also retain your ability to call any of the GWRC operations team, at any time to talk about any concerns you might have.

How much is it going to cost? Is it going to affect my rates?

There are costs associated with the changes proposed in the Te Kāuru Floodplain Management Plan. As a result rates will increase, however this will be gradual with increases estimated as follows:

- 1-2 years – approximately $2-3 per $100,000 CV
- 3-5 years – approximately $5-10 per $100,000 CV
- 6-10 years – approximately $10-23 per $100,000 CV

What are you going to do with the scheme reserves?

Over time it is likely that the existing scheme reserves would be amalgamated into a single reserve. In this case, a transitional period will be required, whereby previous scheme reserves could be "earmarked" for expenditure within that scheme area only.

Are you going to let the river do what it wants?

No. Whilst we will allow the river more room, rivers will remain within river management lines (including the buffers) on the Western Rivers.

How is it different to what you currently do in the rivers?

The two main changes to our river management approach are:

- Allowing the river more room within the current river management lines; and
- Planting of the riparian buffer to assist with bank stability, erosion control and increase biodiversity, cultural values and ecological enhancement.

Are there still going to be bulldozers in the river?

Yes, there will still be bulldozers working around the rivers. It is intended that GWRC will be required to intervene less frequently in the western river channels with mechanical means, however, the overall scale of works will not necessarily be less.

All these rivers are different, are you lumping them together?

No, we are considering each river separately. In fact, each reach of each river has a separate section within Part 2 of the proposed Floodplain Management Plan. Within Part 2, each reach has its own description and works requirements.

Can't you just top up the existing stopbanks in town?

One purpose of Stage 1 of implementation in the urban area is to investigate the condition of the stopbanks by undertaking a geotechnical assessment. Once this is complete, we will be able to ascertain if the current stopbanks are structurally sound. Upgrading the existing stopbanks may be one of the options that is considered once we have more information.

How does Te Kāuru link with the Ruamāhanga Whaitua?

The Ruamāhanga Whaitua Committee has finalised a Whaitua Implementation Programme (WIP) in August 2018, which has made recommendations to GWRC on the ways in which people in the catchment want to manage their water to improve water quality and to implement the National Policy Statement for Freshwater Management.

The Te Kāuru process has been carried out in parallel with the Whaitua process and it is important that Te Kāuru supports the Whaitua outcomes. Te Kāuru sets the direction of our flood and erosion management activities in the rivers of the upper Ruamāhanga catchment. This puts Te Kāuru at the front line of implementing some of the Whaitua recommendations.

What does it mean for insurance?

The current flood maps are still in use and we recommend that residents advise their insurance company if they are in a flood hazard area. However, the maps available on the online GIS viewer include an allowance for climate change. From our conversations with insurance companies we understand that they are usually more interested in flood hazard under today's climate because it reflects the risk they are insuring. GWRC is happy to provide additional information (including maps without climate change included) to assist with any queries from insurance companies.

The new maps will be available showing today's hazard (no climate change) and future hazard (including climate change).