

If calling please ask for: Democratic Services

9 May 2018

Wairarapa Committee

Order Paper for meeting to be held in the Hurunui o Rangi Room, Carterton Events Centre, 50 Holloway Street, Carterton on:

Tuesday, 15 May 2018 at 10.00am

Membership of Committee

Councillor Staples (Chair) Councillor Donaldson (Deputy Chair) Councillor Laidlaw Mayor Booth Councillor Dalziell Councillor Wright

Greater Wellington Regional Council Greater Wellington Regional Council Carterton District Council Masterton District Council South Wairarapa District Council

Greater Wellington Regional Council

Nelson Rangi Reuben Raihania Tipoki

Recommendations in reports are not to be construed as Council policy until adopted by Council

Wairarapa Committee

Order Paper for meeting to be held on Tuesday 15 May 2018 in the Hurunui o Rangi room, Carterton Events Centre, 50 Holloway Street, Carterton at 10.00am

Public Business

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Please note that these minutes remain unconfirmed until the Wairarapa Committee meeting on 15 May 2018

Report 18.44 20/02/2018 File: CCAB-628029985-83

Minutes of the Wairarapa Committee meeting held on Tuesday, 20 February 2018 in the Hurunui o Rangi room, Carterton Events Centre, 50 Holloway Street, Carterton at 10:03am

Present

Councillors Staples (Chair) and Laidlaw (Greater Wellington Regional Council), Mayor Booth (Carterton District Council), Councillor Dalziell (Masterton District Council) (from 10:08am) and Deputy Mayor Jephson (South Wairarapa District Council).

Nelson Rangi.

Public Business

1 Apologies

Moved

(Cr Laidlaw/ Mayor Booth)

That the Committee accepts the apologies for absence from Councillors Donaldson and Wright.

The motion was **CARRIED**.

2 **Declarations of conflict of interest**

There were no declarations of conflict of interest.

3 Public participation

There was no public participation.

4 **Confirmation of the minutes of 9 November 2017**

Moved

(Mr Rangi/ Mayor Booth)

File: CCAB-628029985-78

(Mayor Booth/ Cr Laidlaw)

That the Committee confirms the minutes of 9 November 2017, Report 17.455.

The motion was CARRIED.

5 **Public Transport update**

Angus Gabara, Manager, Rail Operations, spoke to the report.

Report 18.36

Moved

That the Committee:

- 1. Receives the report.
- 2. Notes the content of the report.
- 3. Recommends that GWRC Council endorses to the Regional Transport Committee that the Diesel-Electric Multiple Units be accorded a higher priority in the Regional Land Transport Plan.

The motion was CARRIED.

Councillor Dalziell arrived at 10:08am during discussion of this item.

6 Ruamāhanga Whaitua Process update

Councillor Chris Laidlaw spoke to the report.

Report 18.28

Moved

That the Committee:

- 1. Receives the report.
- 2. Notes the content of the report.
- 3. Requests that the Ruamāhanga Whaitua Committee considers the economic impacts, considers the transition period, and supports the ongoing investigation of efficiency, in relation to the use of the shared allocation of water.

The motion was CARRIED.

File: CCAB-628029985-74

(Mr Rangi/ Mayor Booth)

7 Mangatarere Stream flood hazard

Mark Hooker, Senior Project Engineer, Floodplain Management Plans, spoke to the report.

Report 18.14

Moved

File: CCAB-10-456

(Mayor Booth/ Deputy Mayor Jephson)

That the Committee:

- 1. Receives the report.
- 2. Notes the content of the report.
- 3. Recommends that GWRC Council endorses the use of the Mangatarere Stream flood study area maps by Carterton District Council to inform planning and regulatory functions.

The motion was CARRIED.

8 Waiohine FMP update

John Boon, Chair, Waiohine FMP Project Team, spoke to the report and an updated Attachment 2 to the report, 2018 (latest preliminary) flood map, was circulated to members.

Report 18.29

File: CCAB-628029985-75

Moved

(Deputy Mayor Jephson/ Cr Staples)

That the Committee:

- 1. Receives the report.
- 2. Notes the content of the report.
- 3. Recommends to GWRC Council that the 2018 (latest preliminary) flood map be released for interim use, once it has satisfied the requirements of the peer-review and been reendorsed by the Project Team.
- 4. Recommends that GWRC Council endorses the use of the 2018 (latest preliminary) flood map to inform planning and regulatory functions.

The motion was CARRIED.

9 Te Kāuru Upper Ruamahanga River Floodplain Management Plan

Oral report

Mark Hooker, Senior Project Engineer, Floodplain Management Plans, updated the Committee in relation to recent progress on Volumes 1 and 2 of the Te Kāuru Upper Ruamahanga River Floodplain Management Plan consultation.

Moved

(Cr Staples/ Cr Laidlaw)

That the Committee receives the oral report.

The motion was **CARRIED**.

The meeting closed at 11:03am.

Cr A Staples (Chair)

Date:



 Report
 2018.182

 Date
 9 May 2018

 File
 CCAB-628029985-94

CommitteeWairarapa CommitteeAuthorAngus Gabara, Manager, Rail Operations

Public Transport update

1. Purpose

To inform the Wairarapa Committee (the Committee) of Greater Wellington Regional Council (GWRC) activities relating to Public Transport in Wairarapa.

2. Update on activities

2.1 New bus contracts – Go live

On Monday, 30 April 2018, Metlink launched its new service in the Wairarapa region. This was a great success, with strong conversion of over 530 Tranzit a.to.b cards to Snapper, the launch of seven new Metlink branded buses, and the activation of a new business solution which delivers customer information, enhanced workflow processes and business intelligence to Metlink.

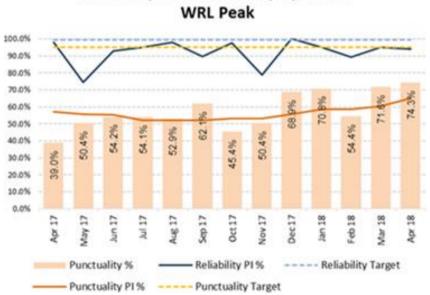
Anecdotally, customers were happy with the changes and knew what to expect. This was in large part due to a comprehensive customer engagement campaign, including the use of AmBUSsadors in the lead up and on the day. Tranzit are also to be commended for their work in the community, promoting the changes.

2.2 Wairarapa rail performance

Wairarapa patronage continues to grow. April year-to-date patronage was 632,119 customers which is a 3.4% increase on the same time last year.

Punctuality has also improved to 74.3% on-time in the peak period. While still not the level of performance we would like to see, it is the highest for 12 months, and would be about 5-6% higher under the older measurement system.

Reliability and Punctuality by Month



SNC-Lavalin report on Wairarapa rolling stock A report on an independent investigation by SNC-Lavalin into rolling stock issues on the Wairarapa Line is in final draft and being reviewed by the major stakeholders. The report is expected to be released publicly in May 2018.

The final draft report includes a number of recommendations and also notes that the overall contribution of rolling stock faults to service failures and delays is relatively minor, at 4% of total delays and 9% of service failures in 2017.

2.4 Nine car trial

2.3

An out-of-service trial of nine car operation was held 2 May 2018. The northbound journey simulated the 4.25pm service. For the Hutt Valley section, all nine cars fit on the platform at Petone and Upper Hutt. However, Waterloo and Taita overhung by approximately 15 metres, leaving the last door off the platform. At Featherston, Woodside and Carterton, the last car overhangs by approximately seven metres, with just the back door off the platform.

The inbound journey creates the same issues, albeit with different doors off the platforms. From an operational perspective, the next step is to complete a risk assessment of how the operator will manage the passengers disembarking these stations safely, and working with KiwiRail locomotive drivers about their stopping marks.

The parties are meeting the week beginning 14 May 2018 and will also incorporate feedback from customers and the online survey.

2.5 Wairarapa Commuters Facebook page

We have begun communicating directly with Wairarapa commuters on the Wairarapa Commuters Public Group Facebook page, (https://www.facebook.com/groups/583994134996200/), particularly focusing

on the nine-car trial to address complaints about capacity. We have posted a poll of stopping options, and also pictures of the 2 May 2018 nine-car trial. So far, the poll has had about 170 responses, with the top two stopping pattern choices being:

- (39%) Masterton, Carterton, Featherston, Upper Hutt and express to Wellington
- (34%) Masterton, Carterton, Matarawa, Woodside, Featherston, Maymorn, Upper Hutt, Petone, Wellington

The next step is to post a second poll with more options by Friday, 11 May 2018, using the data we have collected and incorporating options suggested by commuters.

The top two options of the current poll will be brought forward. As a result of our engagement, we are starting to see positive comments from the commuters about our communication approach. We will continue to engage with them through the Wairarapa Commuters Public Group Facebook page. A forwardlooking schedule of stories has been created to share the work we are doing to improve the Wairarapa Line.

2.6 Rail business cases

A draft Government Policy Statement (GPS) was issued by the Government on 14 March 2018, with submissions closing on 2 May 2018. The GPS signals a significant change in direction and investment priorities.

The GPS introduces two new funding activity classes: Rapid Transit and Transitional Rail. The Transitional Rail activity class has been established to fund business cases for rail infrastructure as an interim measure to address immediate pressures on the rail network ahead of a review of rail funding.

Officers are working closely with KiwiRail and the Government to ensure that key rail infrastructure projects will be able to be funded from this new activity class. These projects include the network track infrastructure catch up renewals (Wairarapa Line and other critical track infrastructure) and unlocking network capacity and improving resilience business case.

A third business case for new rolling stock for Wairarapa services is also being prepared. However, the immediate priorities are the track and capacity/resilience business cases above.

3. Communication

No external communication is proposed as an outcome of the consideration of this report.

4. Consideration of climate change

The matters addressed in this report have been considered by officers in accordance with the process set out in the GWRC Climate Change Consideration Guide.

4.1 Mitigation assessment

Mitigation assessments are concerned with the effect of the matter on the climate (i.e. the greenhouse gas emissions generated or removed from the atmosphere as a consequence of the matter) and the actions taken to reduce, neutralise or enhance that effect.

Officers have considered the effect of the matter on the climate. Officers recommend that the matter will have no effect that warrants the development of a Detailed Scenario Analysis.

Officers note that the matter does not affect the Council's interests in the Emissions Trading Scheme (ETS) or the Permanent Forest Sink Initiative (PFSI)

4.2 Adaptation assessment

Adaptation assessments relate to the impacts of climate change (e.g. sea level rise or an increase in extreme weather events), and the actions taken to address or avoid those impacts.

Officers have considered the impacts of climate change in relation to the matter. Officers recommend that climate change has no bearing on the matter.

5. The decision-making process and significance

No decision is being sought in this report. The report is an update for information only.

5.1 Engagement

Engagement on this matter is unnecessary.

6. Recommendations

That the Committee:

- 1. **Receives** the report.
- 2. Notes the content of the report.

Report prepared by:

Report approved by:

Angus Gabara Manager, Rail Operations **Wayne Hastie** General Manager, Public Transport



 Report
 2018.153

 Date
 8 May 2018

 File
 CCAB-628029985-88

Committee Wairarapa Committee Author Cr Adrienne Staples, Chair - Waiohine FMP Steering Group

Waiohine FMP update

1. Purpose

This report is to provide the Committee with a brief update on the Waiohine Flood Management Plan (FMP) project and the meetings of the Steering Group. It also seeks the Committee's consideration of a recommendation on climate change allowances that has been made by the Project Team and endorsed by the Steering Group.

2. General update

The Project Team has made good progress and is working together well. The Project Team facilitator has estimated progress at about 50%. Major successes have included:

- Completion and release of interim flood maps
- Beginning to look at design options
- Approach and allowances for climate change resolved

The immediate focus of the Project Team will continue to be freeboard, uncertainties and flood mapping, because these lie on the critical path of the project. There is also a push to engage (or re-engage) with iwi and stakeholders before looking, at any detail, at river management, stopbanks or other flood management responses. A number of stakeholder meetings with the Project Team have been set up.

Project Team meetings generally occur weekly, but do not occur unless all members are present. With various absences, there have been periods of several weeks where no meetings occur. The Project Team has trialled longer meetings, or two meetings per week when members are available, but this has been too onerous for the Project Team (most of whom are volunteering their time and having to fit this work around other things). Over the next two months the Project Team wants to be in a position where it is not necessary to meet so often, and we have work structured in such a way that it can continue outside a framework of weekly meetings. Nonetheless, the project is taking longer than envisaged in the original Terms of Reference. The Project Facilitator is seeking ways to keep things moving forward.

3. Climate Change

GWRC's currently adopted value for climate change impacts on future extreme rainfall is a 20% increase out to 2090¹. That value was adopted in a Council report in 2013. It was based on projected temperature increases at that time, and guidance from MfE that we should allow for extreme rainfall intensities to increase by 8% for each degree of warming. Recent work by NIWA has:

- Identified that the 8% value (called an "augmentation factor") is actually more dynamic, and varies both by storm duration and by how extreme the storm is. This means that the augmentation factor can be a lot more than 8%, especially for extreme and short-duration storms, and will vary by catchment.
- Revised the temperature predictions for New Zealand based on four scenarios ("Representative Concentration Pathways" or RCPs): RCP 2.6 (low-end emission scenario), RCP 4.5, RCP 6.0 and RCP 8.5 (high end).

Two senior scientists from NIWA attended a Project Team meeting and presented the latest findings. They stayed to workshop the results with the Project Team and discuss how we might apply them.

The Project Team recommends that as a design scenario, we consider warming under RCP 6.0 (the higher of the two mid-range scenarios) and use an augmentation factor for a 1% ARI^2 flood event relating to a typical 12-hour duration storm on the Waiohine River. The Project Team also recommends that we consider sensitivity scenarios for RCP 2.6 and RCP 8.5 amounts of warming to inform our flood mapping and design of any structural works.

This recommendation results in a design value of 16% increase in rainfall intensity for a 1% AEP flood in 2080-2100 (10% augmentation factor x 1.6 degree Celsius temperature rise). For comparison, the current GWRC value of 20% is based on 8% augmentation factor x 2.5 degree Celsius temperature rise.

This recommendation will need to be considered by Council, as it represents a departure from Council-approved practice.

To note, GWRC's currently adopted value for sea level rise (for hazard identification and design purposes) is 0.8 m to 2090. Sea level rise of this magnitude does not affect flooding on the Waiohine River.

¹ Technically, this is a projection to the period 2080-2100, usually described as being 2090

² Annual Recurrence Interval, or chance each year of occurring

4. Proposed changes to GWRC funding policy

GWRC has proposed changes to its Revenue and Financing (R&F) Policy and is consulting on these as part of its consultation on its Long Term Plan. The changes include moving to a 70% local / 30% regional rating model for Flood Protection (from the current 50/50 model).

The Project Team noted that the proposed changes to the R&F Policy will impact the affordability of outcomes from the Waiohine FMP. They also mean that the local community will feel cost impacts from other FMP projects in the Wairarapa (such as any major projects coming out of Te Kāuru Upper Ruamāhanga FMP or the future Lower Wairarapa Valley FMP) and that these cost impacts will be cumulative. The Steering Group noted this, and also that cost was already an issue with the draft FMP under the 50/50 model. The Steering Group has directed the Project Team to continue to focus on delivering the best solution for the community but has acknowledged that the change in funding model may affect the affordability or willingness of the community to pay for structural solutions.

5. Recommendations

That the Committee

- 1. **Receives** the report.
- 2. Notes the content of the report.
- 3. **Recommends** to GWRC Council that a climate change allowance of an additional 16% rainfall intensity to 2090 be adopted for this work (with sensitivity analysis on lower and higher allowances)

Report prepared by:

Cr Adrienne Staples Chair - Waiohine FMP Steering Group



 Report
 2018.177

 Date
 5 May 2018

 File
 CCAB-628029985-91

CommitteeWairarapa CommitteeAuthorKat Banyard, Project Advisor

Ruamāhanga Whaitua Process Update

1. Purpose

The purpose of this report is to update the Wairarapa Committee on the progress of the Ruamāhanga Whaitua (the whaitua) process.

2. Background

The whaitua process is a community-led, collaborative planning process to address a number of land and water management issues and carry out our obligations under the National Policy Statement for Freshwater Management (NPS-FM). The programme aims to improve the integration of activities and achieve better resource management practices which reflect local aspirations.

The Region has been divided into five whaitua or catchments (see Figure 1). Whaitua committees, consisting of community members and partner representatives, will make recommendations to the Council through a Whaitua Implementation Programme (WIP) report. These committees are a partnership between GWRC, iwi, territorial authorities and the community.

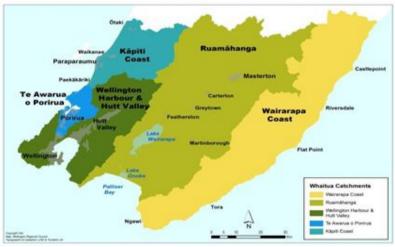


Figure 1: Whaitua catchments

A WIP will contain strategies and actions that will form a programme of work to implement the NPS-FM in the catchment area of the whaitua committee. It will include both regulatory provisions and non-regulatory programmes. The regulatory provisions will be included progressively into the Natural Resources Plan by way of plan changes into the whaitua specific chapters. The recommendations from WIPs are not being considered as part of the current Proposed Natural Resources Plan Schedule 1 process.

The Ruamāhanga Whaitua Committee was the first of the five committees to be established in December 2013.

The Wairarapa Coast Whaitua Committee will be the last of the five committees to be established, currently scheduled for 2020.

3. Update on progress

3.1 Developing water allocation policies

In February and March 2018 the Ruamāhanga Whaitua Committee (the Committee) engaged on the significant proposals within their preferred approach to water allocation. The focus was on the proposals to raise minimum flows in the Upper Ruamāhanga River and the Waipoua River and to seek greater restriction of Category A groundwater users at minimum flow. The Committee invited those water users who would be directly affected to a series of community meetings and drop in sessions. These were well attended, with between 15 and 30 water users at each meeting. The Committee then followed up with a further discussion with 20 water users in early March who had put together written responses to the Committee's proposals. The main concern from users was the impact on their reliability of supply which will be significant, and consequently, the economic impact on them and the wider Ruamāhanga economy.

Following this engagement, the Committee spent several workshops refining their policies, taking into account the feedback from those who would be directly affected, and the needs and values of the wider community. The Committee agreed a transition was needed when implementing the changes to allow time for adaption due to the significant impact on reliability of supply. The Committee has agreed:

- To step the raising of the minimum flow in the Waipoua River over a 10 year period
- to step the raising of the minimum flow in the Upper Ruamāhanga over 20 years, and
- To introduce a 100% cease take for Category A groundwater users at minimum flow after 10 years.

Appropriate reviews would need to be undertaken every 10 years.

The Committee's decisions have been communicated back to the community. Any further discussions on these policies will happen through the engagement on the whole WIP.

3.2 Engagement on the 'whole package' of the WIP

On 14 April 2018, the Committee spent the day at Papawai Marae, listening to mana whenua and their feedback on the Committee's proposed recommendations to date. There was a robust discussion about the involvement of mana whenua and hapu/marae at the sub-catchment (freshwater management unit) level.

On 24 April 2018, the Committee met with stakeholders to provide an update on their recommendations and to ask for feedback. The workshop was well attended, with 22 stakeholders present from a range of organisations. Stakeholders were generally positive about the overall direction of the Committee's work, but were looking for further detail which will be provided at a follow up workshop in May.

An outline of the WIP, along with the draft freshwater management units, and freshwater objectives has been provided to the community and stakeholders. It is included in **Attachment 1** for your information.

Meetings to date with partners, stakeholders and the community have strongly identified the need for ongoing community conversations to implement change beyond completion of the WIP in June. This aligns with our current thinking, to enable catchment communities who will become a key feature of implementation going forward.

4. Key work in the coming months

4.1 Engagement on the 'whole package' of the WIP

The Committee will continue to engage on the contents of their WIP in the coming month. The Committee has three community meetings planned for early May, and is planning follow-up meetings with mana whenua and stakeholders in mid to late May. The Committee is also planning two community meetings with hill country farmers to explain how the proposals will affect them, and meetings with territorial authorities.

4.2 Completion of the WIP and presentation to Council

Officers are currently working with the Committee to draft the chapters that will make up the WIP report and to finalise any outstanding policy issues. At their 14 May 2018 workshop, the Committee will be considering a whole draft report. It will then be further refined and any changes as a result of engagement with mana whenua, stakeholders and the community will be incorporated.

The WIP will include the following chapters: introduction, freshwater objectives and freshwater management units, overarching themes, river and lake management, managing contaminants – discharges and land management, and water allocation. The chapters may change as further iterations are completed. A summary of no more than five pages will be produced as an

alternative, simpler option for those who are more interested in the overall story than the finer details.

The content of the WIP is scheduled to be considered in more detail in Council and Te Upoko Taiao workshops in early June, followed by the WIP being presented to Council in late June.

5. Communication

No communication is necessary as a result of this report.

6. Consideration of climate change

The matters addressed in this report have been considered by officers in accordance with the process set out in the GWRC Climate Change Consideration Guide.

6.1 Mitigation assessment

Mitigation assessments are concerned with the effect of the matter on the climate (i.e. the greenhouse gas emissions generated or removed from the atmosphere as a consequence of the matter) and the actions taken to reduce, neutralise or enhance that effect.

The matters addressed in this report will have no significant effect on the climate.

Officers note that the matter currently does not affect the Council's interests in the Emissions Trading Scheme (ETS) or the Permanent Forest Sink Initiative (PFSI). However, recommendations made by the Whaitua Committee could provide a co-benefit of mitigating climate change. For example, the retirement and planting of erosion-prone land could give effect to sequestering carbon. However, this will not be able to be further analysed until the Whaitua Committee make their recommendations. Officers involved in this work will ensure this is considered in the final WIP report.

6.2 Adaptation assessment

Adaptation assessments relate to the impacts of climate change (e.g. sea level rise or an increase in extreme weather events), and the actions taken to address or avoid those impacts.

An assessment of the impacts of climate change on rainfall and catchment hydrology has been undertaken by NIWA. This information has fed into analysis of impacts on water allocation and contaminant generation and flow. Policy responses will be required to address these issues. Consideration of these is ongoing.

7. The decision-making process and significance

No decision is being sought in this report. This report is for the Wairarapa Committee to receive an update on the progress of the Ruamāhanga Whaitua process.

7.1 Engagement

Engagement on this matter is unnecessary.

8. Recommendations

That the Committee:

- 1. **Receives** the report.
- 2. Notes the content of the report.

Report prepared by:

Report approved by:

Kat Banyard Project Advisor Alastair Smaill Team Leader, Whaitua Report approved by:

Nigel Corry General Manager, Environment Management

Attachment 1: Ruamāhanga Whaitua Process Update - May 2018



Outline of Ruamāhanga Whaitua Committee Whaitua Implementation Programme (WIP)

This document sets out the key points that will form the Ruamāhanga Whaitua Committee's Whaitua Implementation Programme (WIP) report and provides a brief explanation of these points in more detail.

Freshwater objectives

• Set freshwater objectives across 21 freshwater management units (FMU).

See further information:

- Draft map of the freshwater management units
- Summary table of draft freshwater objectives (the water quality we want to achieve)
- Narrative draft freshwater objectives for fish and mahinga kai

Managing contaminants – discharges and land management

• Set load limits for each FMU for nutrients and sediment as rules in the regional plan, and set concentration limits for E. coli as rules in the regional plan

The Committee will recommend limits for nitrogen, phosphorus, sediment and E.coli – the maximum amount of resource use in a sub-catchment. Collectively, those within the sub-catchment are required to stay within the limit as the limit will become a regulation in the regional plan (the Proposed Natural Resources Plan). The limits are based on the maximum amount of resource use that can happen while allowing water quality outcomes to be met. Limits are required to be set by national policy direction.

 Manage point sources with discharge standards consistent with limits and achievement of freshwater objectives

Point sources are discharges from a single, identifiable point e.g. treated water from a wastewater treatment plant being discharged from a pipe into a river. The Committee is recommending that quality standards be set for all point source discharges to ensure limits, and ultimately water quality outcomes in that sub-catchment can be met.

• Manage non-point sources of contaminants through the management of land use activity by rigorous promotion and implementation of 'good management practice'

Non-point sources are diffuse sources of contaminants that don't discharge from a single point which makes them harder to manage. The Committee supports the promotion and implementation of 'good management practice' in both the urban and rural context. What constitutes good management practice varies with different land uses and evolves over time allowing for continuous improvement.



• Promote and support the formation and operation of 'catchment communities' as a key mechanism to achieve limits in each FMU

The Committee supports a community led approach to achieving limits that is largely nonregulatory. Catchment communities are groups of local people who decide to work together to take action to improve water quality in their area. Groups are already forming in the catchment of their own accord e.g. at the Kourarau dam. The Committee supports the formation and operation of these groups.

• Promote and support the implementation of farm planning as a primary tool of management at a farm scale. Whether farm plans will be regulated is still to be determined

Farm plans are a widely used tool in contemporary farming practice. The Committee supports further planning with farmers to create integrated plans for their farms that help achieve the freshwater objectives of their FMU. The Committee's options are either to regulate and require farmers to have farm plans or to use them as a voluntary tool to improve practice.

• Regulate 'high risk' land use changes and intensification

Land use change that has the potential for increased discharge of contaminants and specific 'high risk' land use activities may need to be regulated to ensure catchment limits are met. The Committee is still developing their approach around this.

• Manage urban stormwater through the consenting process in the Proposed Natural Resources Plan

The Proposed Natural Resources Plan (PNRP) sets out an approach to managing stormwater that's a shift from the status quo. It requires local authorities to apply for a 'global' consent to manage all their stormwater network discharges together, to ensure cumulative effects are managed. It also implements a two stage consenting process. In the first stage local authorities are required to collect information on the quality of discharges from their network and to develop a Stormwater Management Strategy. The second stage is focused on managing the stormwater network to address issues affecting water quality.

Stormwater from large sites e.g. state highways, and from land use e.g. subdivision is managed separately through other provisions in the PNRP.

• Ensure wastewater discharges to be largely land disposal

All discharges of wastewater should be to land. There should be no wastewater discharges to the river.

 Reduce sediment loads through riparian management to reduce stream bank erosion across the whaitua, and accelerated erosion mitigation in those FMUs contributing the greatest sediment loads from hill slope erosion (Taueru, Huangarua, Eastern hill streams, Whangaehu and Kopuaranga).



Losses from hill slope erosion in the 'top 5' FMUs (Taueru, Huangarua, Eastern hill streams, Whangaehu and Kopuaranga) amounts to around 66% of the entire annual sediment load in the whaitua coming off land not under native bush. Across all FMUs in the whaitua, streambank erosion contributes around 17% of the total annual load off land not under native bush. Currently, around 70% of the total load comes from non-native land, meaning twice as much sediment is discharged into the catchment from pastoral, lifestyle and urban land uses than from native bush in a year. The Committee's approach aims to target those high risk FMUs for hill slope erosion and for all FMUs to manage streambank erosion. This will mean annual sediment load reduction targets will be set for all FMUs with the aim of achieving these targets by 2050.

• Align funding and support of hill erosion and riparian management for stream bank erosion mitigations in line with FMU sediment reduction targets

In order to achieve the sediment targets for each FMU, the Committee is recommending further sub-catchment planning in the 'top 5' FMUs to identify how to best achieve these reductions. To support both this implementation with communities and to ensure riparian planting happens effectively and extensively in order to reduce stream bank erosion, the Committee recommends GWRC aligns their support of erosion management to align with these targets and sub-catchment plans.

 Improve information and accessibility of this information of sediment loss from land uses, impacts on river and lake health and progress of sediment mitigation activities

As part of enabling communities to understand how sediment mitigation activities are progressing, there is a need to improve the data and access to data on sediment losses across the whaitua. In line with this, further understanding of the impacts of sediment on in-stream and lake values is required to ensure limit setting processes in the future are improved.

• Greater Wellington Regional Council (GWRC) set up and operate fit for purpose discharge and contaminant accounting system as required by the National Policy Statement for Freshwater Management (NPS-FM)

Greater Wellington Regional Council is required by national policy to establish and operate a freshwater quality accounting system. The aim is to improve information on the sources of contaminants and improve transparency by it being easily accessible by the public. The Committee has used the information available to date when setting their freshwater objectives and limits.

• Collect nutrient discharge data at a sub-FMU scale by regulation

Properties over a certain size will be required to provide regular nutrient discharge data to GWRC. GWRC will collect this information to operate a freshwater accounting system as required by national policy, to determine whether nutrient limits are being met, and to assess the effectiveness of the policies recommended by the Ruamāhanga Whaitua Committee. It is also essential information to use when determining whether to introduce an allocation regime in the future.



• Greater Wellington Regional Council reviews the need for a nutrient allocation regime 10 years post Plan Change

The Committee does not want to implement a nitrogen allocation regime (i.e. individual landowners being assigned a right to discharge up to a certain amount of nitrogen) at this time. The Committee favours a more non-regulatory approach where the community works together to stay within an overall sub-catchment nitrogen limit alongside rules around land use change and potentially other land use activities to ensure catchment limits are met. This decision will be reviewed in 10 years' time. At that time an allocation regime might be a more suitable way of managing nitrogen if current water quality outcomes aren't being met.

• Emphasise and promote restoration of aquatic habitat and riparian margins

Alongside the reduction of contaminants, the Committee strongly supports the active promotion and support of improving aquatic and riparian habitat in order to achieve the Ruamāhanga freshwater objectives. For instance, reductions in periphyton will be met through both the reduction in nutrients reaching waterways and the effective shading of streams through extensive riparian planting to reduce temperature and sunlight.

River and lake management

• "Slow water down in the catchment" and promote groundwater recharge

The Committee supports an integrated water management approach for the Ruamāhanga whaitua. Such an integrated, catchment-wide system would aim to increase ecological and social health and wellbeing as well as improving water use reliability and resiliency to the pressures of changing weather systems under climate change. This would bring together multiple management options over the long and short term, rather than dependency on any one mechanism. Management options for lakes and river management could include attenuation of water in soils, wetlands, lakes and groundwater systems across the catchment. Other options could include integrated water storage mechanisms and improved water use efficiency.

• Restore Lakes Wairarapa and Onoke with emphasis on "in-lake" methods

Restoring the connection between the Ruamāhanga River and Lake Wairarapa would be a critical part of restoring the relationship between and mauri of both water bodies. For both lakes, the existing contaminant loads, changes to hydrodynamics and ongoing contaminant loads all contribute to poor ecosystem health and much diminished mahinga kai values. The modelling points to the role of 'in-lake' management methods in restoring the health of the lakes alongside reductions of contaminants reaching the lakes from land use activities and discharges.



• Investigate further options for restoring the Ruamāhanga River flow into Lake Wairarapa, maintaining higher lake levels and different lake opening regimes.

Modelling has shown positive signs that changing the hydrodynamics of Lake Wairarapa could be an effective way of improving the health of the lake from its currently very poor state. Changing the lake's hydrodynamics could include restoring the river flow into the lake, maintaining higher lake levels and different lake opening regimes. Substantial further investigation should be undertaken to explore these options, the impacts of any such changes and to identify feasible options for mana whenua and the community to consider further.

Promote wetland restoration

Wetland restoration could play an important role in the whaitua for improving ecosystem health and mahinga kai values and for contributing to the overarching aim to 'slow water down' in the catchment and retain more water in soils. Options could include constructed wetlands for flood detention and restoring wetland vegetation in river corridor bends.

Seek opportunities for enhancing natural character of rivers

Alongside improvements to water quality attributes and flow, improving the habitat of streams and rivers will be a vital part of achieving the Ruamāhanga whaitua freshwater objectives. For example, increasing riparian margins will play a vital role in increasing stream shade and reducing water temperature, which in turn reduces nuisance algae growth. Enhancing natural character could include improved riparian vegetation for bank stabilisation, increased shading, and improved pool, run, riffles sequences in rivers.

Water allocation

Base water allocation largely on existing regime in proposed Natural Resources Plan

The proposed Natural Resources Plan sets minimum flow levels and allocation amounts for the rivers and streams in the Ruamāhanga Whaitua. Minimum flow levels are the level at which takes from the river must cease and allocation amounts are the amount of water available to be taken from the river.

• Minimum flow levels set to provide 90% habitat protection for panoko (torrentfish).

Minimum flow levels are typically set using measures of ecological health. The amount of habitat available for fish when flows are low is often used as the measure. By providing a level of protection to fish, you are also providing for other values such as cultural or recreational. The Committee had a choice about what fish species to use to set the minimum flow levels and the level of protection that minimum flow should provide. Panoko (torrentfish) was selected as the measure as they are found widely throughout the Ruamāhanga Whaitua and are a sensitive species.

Most of the minimum flow levels in the pNRP are close to or already achieve the desired level of protection for the rivers and streams in the Ruamāhanga Whaitua. However, the minimum flow levels in two rivers (Upper Ruamāhanga and Waipoua) are well below the 90% protection level.



• Raise minimum flows levels in several rivers, including the Upper Ruamāhanga (20 year transition) and Waipoua (10 year transition)

To provide for 90% habitat protection at low flows the minimum flow levels in the Upper Ruamāhanga and Waipoua need to be raised (currently they sit around the 70% protection level). Increasing the minimum flow levels means water users are likely to be required to stop taking water more frequently.

To ensure water users have time to adapt, the new minimum flows will not come into place immediately. In the Upper Ruamāhanga, there will be no change in the minimum flow level for 10 years. After 10 years and then at 5 yearly intervals the minimum flow will increase by approximately 280L/s each step to get to a new minimum flow of 3250L/s.

In the Waipoua there will be no change in the minimum flow level for 5 years. After five years and again at 10 years the minimum flow level will increase at each step by 45L/s to get to a new minimum flow level of 340L/s.

A small increase (10L/s) in the minimum flow level for the Kopuaranga River is also proposed.

Minimum flow levels, where group or community water supplies have to reduce to take to the health needs of people, will increase in the Waingawa, Waiohine and Tauherenikau Rivers. There is no change to the minimum flow levels for other users in these rivers.

• Further restrict Category A groundwater from pNRP to cease take at minimum flow levels (10 year transition)

Category A groundwater takes are considered to be those groundwater takes that have a direct connection to the nearby river or stream, i.e. pumping from the bore has an effect on the nearby river, stream or lake. Allowing Category A groundwater users to continue to take water and affect the nearby stream when the flows are low does not provide for instream values.

In 10 years' time, Category A groundwater takes must cease their take when the nearby river or stream reaches its minimum flow level. (Currently, Category A groundwater takes must restrict their take by 50% when the nearby river or stream reaches its minimum flow level).

• Further investigations of Category A groundwater takes

Greater Wellington Regional Council will undertake further investigations to ensure those groundwater takes classified as Category A do have a direct connection with a nearby river, stream or lake.

• Reduce the permitted activity threshold for taking water to 5 cubic metres per day and cease permitted takes at minimum flows

The current permitted take (no resource consent is required) is 20 cubic metres per day and this considerable volume (in addition to reasonable domestic use and animal drinking water) is hard to justify where catchments are at, or in some cases, above full allocation.

Water users are able to take water for reasonable domestic use and animal drinking water without requiring resource consent. In addition to these uses a water users may take an additional 5 cubic meters of water per day for other uses.



• Appropriate storage at a range of scales

Storage can range from rain water tanks supplying household water to larger on farm storage for irrigation, or aquifer recharge.

• Clearly set minimum flows on all small streams in whaitua (often 90% MALF default initially) and carry out minimum flow investigations in small streams where use pressure is occurring.

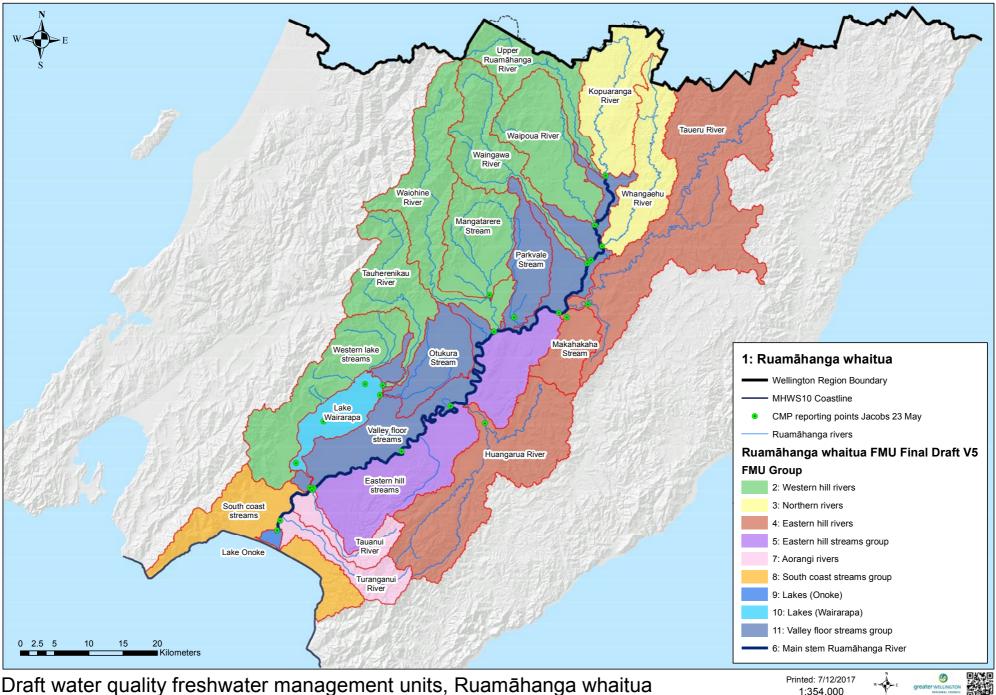
Undertake targeted investigations in the Parkvale Stream, Booths Creek, Makoura Stream, Kuripuni Stream, Tauanui and Turanganui rivers to determine the specific minimum flow level requirements and allocation limits for each river or stream. Outcomes of the investigations will be implemented through plan changes and review of consent conditions.

• Ensure appropriate conditions on resource consents for taking water to keep up with policy settings

Conditions on longer term consents will be reviewed to ensure they incorporate any changes to minimum flow requirements.

• Use consent review conditions and water shortage directions especially where adverse effects are occurring

On occasions when adverse effects are occurring in a particular river or stream, water shortage directions (under the Resource Management Act 1991) may be issued to further restricted both consented and permitted water use.



Draft water quality freshwater management units, Ruamāhanga whaitua

1:354,000

Summary of draft Ruamähanga whaitua freshwater objectives for rivers * indicates where current state is based on modelled information or expert best knowledge, otherwise all current state analyses based on monitoring data

	NOF attributes									attributes			
River	E.coli	E.coli	Periphyton	Periphyton	Ammonia toxicity	Ammonia toxicity	Nitrate toxicity	Nitrate toxicity	MCI	мсі	When by?	FMU group	
	Current state	Objective	Current state	Objective	Current state	Objective	Current state	Objective	Current state	Objective			
Tauanui River	D*	A	C/D*	В	A*	A	A*	A	Fair*	Good	2040	Aorangi rivers	
Turanganui River	B*	В	C/D*	В	A*	А	A*	A	Fair*	Good	2040	Aorangi rivers	
Taueru River	С	С	D*	С	A	A	В	A	Good	Good	2040	Eastern hill rivers	
Makahakaha Stream	A*	A	-	В	A*	A	B*	A	Fair*	Good	2040 (periphyton 2030)	Eastern hill rivers	
Huangarua River	В	В	С	В	A	A	A	A	Fair	Good	2080	Eastern hill rivers	
Eastern hill streams	-	В	-	В	-	А	-	A	-	Fair	Maintain	Eastern hill streams group	
Ruamāhanga - Wardells	C*	С	B*	В	B*	А	A*	A	Fair*	Fair	2040	Main stem Ruamāhanga River	
Ruamāhanga - Gladstone Bridge	D	С	В	В	В	А	A	A	Fair*	Fair	2040	Main stem Ruamāhanga River	
Ruamāhanga - Waihenga	A	A	В	В	B*	A	A*	A	Fair*	Fair	2040	Main stem Ruamāhanga River	
Ruamāhanga - Pukio	В	В	-	В	A*	Α	A*	A	Good*	Good	Maintain	Main stem Ruamāhanga River	
Ruamāhanga - upstream of confluence with Lake Wai outlet	B*	В	-	В	A*	А	A*	A	Fair*	Fair	Maintain	Main stem Ruamāhanga River	
Kopuaranga River	D	С	D	С	A	А	A	A	Fair	Good	2040	Northern rivers	
Whangaehu River	D	С	-	С	A	A	A	A	Fair*	Good	2040	Northern rivers	
Parkvale Stream	E	С	В	В	В	А	В	A	Fair*	Good	2040	Valley floor streams group	
Otukura Stream	D*	С	-	В	B*	А	B*	A	-	Fair	2040	Valley floor streams group	
Valley floor streams	-	С	-	В	-	A	-	A	-	Good	2040	Valley floor streams group	
Upper Ruamāhanga River	D	С	A	A	A	А	A	A	Fair	Good	2040	Western hill rivers	
Waipoua River	В	A	B*	A	A	А	В	A	Fair	Good	2040	Western hill rivers	
Waingawa River	A	A	A	A	A	A	A	A	Good	Good	Maintain	Western hill rivers	
Mangatarere Stream	D	В	С	B, then A	В	B (top of band)	В	A	Fair	Good	2040 (2080 for MCI)	Western hill rivers	
Waiohine River	A	A	A	А	A	A	A	A	Fair	Good	2080	Western hill rivers	
Tauherenikau River	A	A	A*	A	A	A	A	A	Fair	Good	2040	Western hill rivers	
Western lake streams	-	A	-	A	-	A	-	A	-	Good or better	Maintain	Western hill rivers	
South coast streams	-	A	-	А	-	A	-	A	-	Fair	Maintain	South coast streams group	

Summary of draft Ruamāhanga whaitua freshwater objectives for lakes

	NOF attributes							Non-NOF attributes										
Lake	E.coli	E.coli	Phytoplankton	Phytoplankton	Total nitrogen	Total nitrogen	Total phosphorus	Total phosphorus	Ammonia toxicity	Ammonia toxicity	Trophic level index	Trophic level index	Total suspended sediment		es	Macrophyt es	When by?	FMU group
	Now	Objective	Now	Objective	Now	Objective	Now	Objective	Now	Objective	Now	Objective	Now	Objective	Now	Objective		
Lake Wairarapa	A	A	D	С	С	С	D	С	A	A	Very poor	Poor	Poor	Fair	D	С	2080	Lakes
Lake Onoke	B/C	A	В	В	С	В	В	В	A	A	Poor	Average	Poor	Fair	D	С	2040	Lakes



Specific Freshwater Objectives for Fish and Mahinga Kai

These freshwater objectives apply to all the identified water body categories. Particular emphasis is placed upon the extensive nature and important characteristics of small streams, wetlands and backwaters in providing healthy fish habitat and the conditions for mahinga kai species, places and activities to thrive.

Freshwater objectives for rivers

- Protection and restoration of significant indigenous ecosystems including habitat (of lakes and rivers) for threatened/at risk species, migratory fish and inanga spawning (link to Schedule F) Note- existing in the pNRP
- Protect and restore Trout fishery and spawning (areas in Schedule I) Note existing in the pNRP
- Maintain 90% habitat space at MALF for torrent fish
- Indigenous fish and taonga species are able to access all tributaries of the Ruamāhanga system from the coast and lowland wetlands up to and including first order streams throughout the catchment to complete their life cycle.
- The fish habitat has diverse natural characteristics (e.g. riffles, pools, runs, backwaters, wetlands) required for abundant and healthy indigenous fauna and taonga species.
- Watercress is abundant and healthy, safe to eat and free from spray and other contaminants.
- Marae and mana whenua urban communities have access to abundant and healthy mahinga kai species that are safe to eat and are available in quantities that enable sustainable harvest and support the manaakitanga of Wairarapa marae communities.
- Mauri of waterbodies is enhanced by restoring ecological habitats e.g. riparian planting, improving water quality, healthy and abundant mahinga kai is readily available.
- Threatened fish species and their habitat are recovering and are enhanced to show increase in new populations.
- Removal of pest fish.
- Restore habitats closer to the sea first to better protect indigenous fish.

Freshwater objectives for Wairarapa Moana and Onoke

- Exotic fish populations are at a level where they are not restricting the vitality of indigenous fish populations and the ability of mana whenua to undertake mahinga kai harvest.
- All age classes of kakahi are present indicative of a sustainable population.

ENPL-6-2027



- Black flounder and other salt water species are abundant.
- Tuna fishery is restored.
- Onoke mouth is managed in a way (calendar) that meets the needs of migratory (diadromous) fish species and mahinga kai harvest.
- Restore native fish habitat for indigenous fish.

Specific fish species and places

- Wetlands are restored and increased to support thriving mudfish, inanga spawning and tuna populations.
- Western rivers are managed to support longfin tuna and deep pool habitat. Torrent fish are abundant in riffles.
- In Eastern rivers sediment is reduced and habitat increased to enable tuna to thrive.
- Western lowland rivers including the main stem Ruamāhanga have increased habitat to enable inanga spawning, deep pools for tuna and riffles for torrent fish to thrive.
- Urban streams are protected from development and piping to support tuna, kokopu and redfin bully.

Additional (to those in the PNRP) outstanding places

Mahinga kai are abundant and healthy in the following outstanding water bodies of significance to Wairarapa marae, mana whenua and the wider Wairarapa community:

- Makoura Stream
- Kuripuni Stream
- Papawai Stream
- Mangarara Stream
- Carters Reserve
- Turanganui River
- Tauanui River

Education objective for fish

• To improve information and understanding of indigenous fish and mahinga kai, including why they are important in the whaitua.



 Report
 2018.154

 Date
 4 May 2018

 File
 CCAB-628029985-89

CommitteeWairarapa CommitteeAuthorFrancie Morrow, Project Manager – Floodplain Management Plans

Te Kāuru Upper Ruamahanga River Floodplain Management Plan Update

1. Purpose

This report is to provide the Committee with an update on the Te Kāuru Upper Ruamahanga Floodplain Management Plan (TKURFMP) project.

2. Comment

A project manager's report was presented to the TKURFMP Subcommittee on 8 May 2018 for its consideration. This report has been attached (Attachment 1) for your information.

3. Consideration of climate change

The matters addressed in this report have been considered by officers in accordance with the process set out in the GWRC Climate Change Consideration Guide.

3.1 Mitigation assessment

Mitigation assessments are concerned with the effect of the matter on the climate (i.e. the greenhouse gas emissions generated or removed from the atmosphere as a consequence of the matter) and the actions taken to reduce, neutralise or enhance that effect.

Officers have considered the effect of the matter on the climate. Officers recommend that the matter will have an effect that is not considered significant.

Officers note that the matter does not affect the Council's interests in the Emissions Trading Scheme (ETS) or the Permanent Forest Sink Initiative (PFSI)

3.2 Adaptation assessment

Adaptation assessments relate to the impacts of climate change (e.g. sea level rise or an increase in extreme weather events), and the actions taken to address or avoid those impacts.

GWRC plans for climate change in assessing the degree of future flood hazard and in determining an appropriate response. There are only specific, limited situations in which climate change is not relevant (for example, planning for present-day emergency management).

In assessing flood hazard and determining appropriate structural and/or nonstructural responses in areas subject to flood risk, GWRC is applying a rainfall increase of 20% to the flood hydrology in the FMP to account for climate change over the next 100 years.

Guidance from the Ministry for the Environment will be updated from time to time and our approach will be revised in line with any updates.

4. The decision-making process and significance

No decision is being sought in this report.

4.1 Engagement

Engagement on this matter is unnecessary.

5. Recommendations

That the Committee:

- 1. **Receives** the report.
- 2. Notes the content of the report.

Report prepared by:	Report approved by:	Report approved by:
Francie Morrow Project Manager – Floodplain Management Plans	Graeme Campbell Manager, Flood Protection	Tim Porteous Acting General Manager, Catchment Management

Attachment 1: Te Kāuru Upper Ruamahanga River Floodplain Management Plan Project Manager's report May 2018

Attachment 1 to Report 2018.154



Report2018.125Date6 April 2018FileCCAB-628029985-90

CommitteeTe Kāuru Upper Ruamahanga FMP SubcommitteeAuthorFrancie Morrow, Project Manager – Floodplain Management Plans

Te Kāuru Upper Ruamahanga FMP Project Manager's Report

1. Purpose

To update the Subcommittee regarding general items that influence or are a part of the Te Kāuru Upper Ruamahanga Floodplain Management Plan (the TKURFMP), as well as outlining other flood protection activities that are being undertaken within the catchment area by Greater Wellington Regional Council (GWRC).

2. Update on the project programme

The project programme was updated and reported to the Subcommittee in September 2017. This programme aims to complete consultation at the beginning of 2019.

Consultation on GWRC's draft Long Term Plan (LTP) commences in March 2018 and will conclude with council endorsement of the LTP, this is programmed for June 2018. Consultation for TKURFMP has been reprogrammed to commence after the endorsement of the LTP. TKURMP Volume 1 and 2 consultation is now programmed to commence in July 2018. Updated project milestones are listed in Tables 1-3. It should be noted that agreement with Masterton District Council (MDC) regarding the flood hazard through Masterton is a hold point for the Waipoua option development pending completion of the update to the hydraulic model for the Waipoua River.

Table 1:	Rural FMP stages
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Rural FMP stages and milestones	Date
Present an early working draft rural FMP to the	Completed:
Subcommittee for input and feedback	Dec 2016
Refine and confirm the options to a preferred option	Completed
	October 2017
Present a draft rural FMP for public consultation to the	Completed
Subcommittee for review	November 2017

Acceptance of the draft rural FMP by the Subcommittee	Completed March 2018
Decision Point : Seek endorsement from GWRC, MDC	February –June
and CDC to proceed to public consultation	2018
Public consultation on draft rural FMP	July to
	September 2018
Revision of draft rural FMP	Late 2018

Table 2: **Urban FMP stages**

Urban FMP stages and milestones	Date
Masterton flood hazard agreement with MDC via the	April - May
Waipoua Officers Working Group and Masterton	2018
Waipoua Urban Area Project Group	
Decision Point : Seek endorsement from GWRC and	May 2018
MDC to proceed to option development	
Completion of option combination report for urban	July 2018
Masterton	
Decision Point : Seek endorsement from GWRC and	July 2018
MDC to proceed with drafting urban FMP	
Present a draft urban FMP to the Subcommittee for	August 2018
consideration	
Revisions of draft urban FMP and endorsement from	October 2018
Subcommittee	
Decision Point : Seek endorsement from GWRC, MDC	October 2018
and CDC to proceed to public consultation	
Public consultation on draft urban FMP	Late 2018
Revision of draft urban FMP	Late 2018

Combined FMP stages Table 3:

Combined FMP stages and milestones	Date		
Combination of rural and urban FMP documents into a	Early 2019		
proposed FMP			
Consultation and formal submissions and hearing on the	Early 2019		
proposed FMP			
Decision Point : Seek endorsement of the final FMP	Early 2019		
from the TKURFMP Subcommittee, GWRC, MDC and			
CDC			
Finalisation of Te Kāuru Upper Ruamahanga FMP	Mid 2019		
Recommend to GWRC Environment and Wairarapa	Mid 2019		
Committees			
Adoption by GWRC	Mid 2019		

Consultation planning 3.

The outline consultation and engagement process for Volumes 1 and 2 were briefly discussed with the Subcommittee in November 2017 and further refined in February, March and April 2018.

The Subcommittee highlighted the importance of vision and aims of the FMP as part of the consultation process, have helped to develop key messages, and made it clear that community understanding of the FMP is a goal of the consultation process.

Proposed consultation activities were discussed with the Subcommittee, MDC and CDC in February 2018. These include, but are not limited to:

- Initial and on-going communication with affected landowners and the wider community via media (including social media), newsletters, emails, and marketing.
- Small-group meetings with riverside landowners to discuss the concepts within the FMP and location specific responses in a small group setting.
- Drop-in centres at various locations open to the wider community for discussions with project team members, Subcommittee members, and other officers relating to the project.
- Summarising feedback received and the outcomes of the consultation process.

An additional report at this meeting is seeking endorsement from the Subcommittee of the Communications and Engagement Plan.

4. Wide design line consideration

At the 10th April workshop, Mark Hooker presented work completed by Kyle Christensen on how the existing river management envelopes compare to the "wide" theoretical envelopes. The Subcommittee indicated that it prefers the FMP to continue focussing on implementing flexible, vegetated buffers within the existing river management envelopes as described in the draft FMP; however, officers should keep looking at any specific areas that show promise for widening river edge envelopes where this offers particular benefits such as addressing major degradation problems or achieving multiple FMP/Whaitua outcomes and there is land owner support.

5. Waipoua hydraulic modelling update

Development of the Waipoua River hydraulic model has made good progress. The model has been converted into a 'flexible mesh' model instead of a 2D grid based model.

Flexible mesh is the latest industry standard, and enables greater definition in certain areas, flexibility as to where those areas are, and is easier to adapt if necessary. This new flexible mesh model is running well, it is currently being calibrated for the 1998 and 2012 flood events. These calibrations are being agreed with the Waipoua Officers Working Group.

A peer review was undertaken of the hydraulic model by Tonkin + Taylor in March and no significant issues were noted. Minor changes to the model are

being made a result of this peer review; they are not expected to have any major impact on the model results.

The next step is to run the sensitivity scenarios and determine and agree a freeboard allowance for the design events. This work-stream is now on the critical path for having a draft FMP completed by the end of 2018. We need to be focusing our resources on this activity over the coming months to ensure we can achieve the agreed programme of a completed Te Kāuru FMP by mid-2019.

6. Operations and maintenance update

The Flood Protection department has been engaged in a number of works within the Te Kāuru Upper Ruamahanga area.

Some examples of works include:

- Stopbank erosion Ruamahanga River, Rathkeale
- Habitat provision Ruamahanga River, Black-billed gull
- Bank stabilisation Waipoua River, MDC recreational path
- Bank vegetation clearance Waipoua River, Mawley Park

STOPBANK EROSION Ruamahanga



Photo 1: Prior to Works

An issue occurred at the end of September 2017 following a small flood which resulted in 15m of bank erosion that came up to the toe of the Rathkeale stopbank. The repairs were fast-tracked and the work was completed in the first week of October. The remedial action included cabled willow tree and willow pole planting. The remedial work has held out well and the area will continue to be monitored as the willow protection establishes.



Photo 2: Works in progress

HABITAT PROVISION Ruamahanga

Near to Black Rock Road on the Ruamahanga River GWRC officers from the flood protection and biodiversity departments worked with Forest & Bird to provide additional nesting areas for black-billed gulls. The work involved clearing a number of islands of weed/vegetation to reduce risk of predators to the birds. Black-billed gulls are the worlds most endangered gull species and in recent years concerns had been raised about population decline in some areas of NZ.

BANK STABILISATION Waipoua

There was an issue with an eroding bank and exposed rail-irons upstream of the Colombo Road Bridge and adjacent to an MDC recreational path. This was a health and safety issue as the bank is steep with the water directly below. The solution involved:

- On the true right bank cabled willow trees were put in place to protect the bank.
- On the true left bank, channel widening was completed to give the river more room and ease pressure on the tree work edge. MDC were involved with this work.

BANK VEGETATION CLEARANCE Waipoua



Photo 3: Prior to Clearing

The true left bank of the Waipoua River, adjacent to Mawley Park, had an issue with overgrown pest plants including blackberry and old man's beard. The area was cleared and reseeded with grass. This has resulted in additional green space within the urban area and a perception of improved property security for residences adjacent to Mawley Park.

7. Waiohine Floodplain Management Plan update

Interim flood maps have been released for the Waiohine floodplain based on the work done in late 2017/early 2018 by Matthew Gardner of Land River Sea consulting. These maps are considered interim because:

- The Project Team had yet to confirm the approach to climate change and uncertainties/sensitivities in the mapping (the interim mapping adopts values from the previous maps)
- They have not been formally consulted on with the community yet
- They have been peer reviewed but the independent audit will not be closed out until the above matters are completed.

Current work focusses on modelling of sensitivity scenarios to inform how to address uncertainty in the mapping, and also modelling indicative stop-bank alignments to understand how these impact flooding in the new model. Stakeholder engagement has also been a particular focus and the team is trying to re-engage with stakeholders and iwi.

8. Ruamāhanga Whaitua update

The Ruamāhanga Whaitua Committee has developed a draft set of freshwater objectives – the environmental states they want to see achieved in rivers and lakes in the Ruamāhanga catchment. Freshwater objectives have been developed for measures required by the NPS-FM such as *E.coli* and periphyton, and for others measures the Ruāmahanga Whaitua Committee think are important such as native fish and macroinvertebrate community health. Where the Ruāmahanga Whaitua Committee is looking to recommend an objective that is an improvement on the current state it has agreed on a timeframe for this to occur.

The Ruamāhanga Whaitua Committee has also been engaging with the community and stakeholders on their preferred approach to water allocation. The current focus is on the proposals to raise minimum flows in the Upper Ruamāhanga and the Waipoua Rivers and to seek greater restriction of Category A groundwater users at minimum flow. The Ruāmahanga Whaitua Committee held three public meetings and two drop in sessions with those water users potentially affected if the changes were implemented. They received feedback on the potential changes, the timeframes over which people thought changes could be phased in, and any innovative solutions people had to aid a transition. The Ruāmahanga Whaitua Committee is using the feedback to further develop their preferred approach.

The Ruāmahanga Whaitua Committee is now moving into the next phase of their work, completing their work on freshwater objectives and developing their policy packages to deliver on these objectives in more detail. The Ruāmahanga Whaitua Committee will be engaging with the community and stakeholders on the 'whole package' in April 2018. It is expected the Whaitua Implementation Programme (WIP) will be presented to Greater Wellington Regional Council in mid-2018.

9. Water Wairarapa update

In late 2017, Water Wairarapa broadened its mandate from a rural water scheme focus to encompass community-wide public benefits, especially in the light of the most recent regional-level climate change information.

Since October 2017, the Water Wairarapa project initiated a series of investigations to establish what effect the combination of climate change and the Whaitua's water limitation recommendations will have on activities and water uses that depend on water reliability in the Ruamahanga valley floor.

So far, the project's reframing studies have revealed that under the regime initially recommended by the Ruamahanga Whaitua, the period after December each year, (but not for the full irrigation season), will be more difficult for agricultural activities. The proposed limitations will generally accentuate both the length and frequency of the existing restrictions.

Also, raising the minimum flows and changing the step-downs will have significant effects of water reliability. Aqualinc's interim assessment stated that storage would be a means of mitigating these issues.

Currently, the investigations are establishing the effects of the climate change projections on the Ruamahanga valley's water resource, especially the reliability of water on existing and future water users. So far this work has shown that natural river flow levels are already decreasing over time excluding the effects of water extraction. The report completing this piece of work will not be available until late April after which the Whaitua's water limitation effects and the projected climate change effects will be integrated to provide a picture of water reliability into the future.

Following this, the investigations will look at the implications for components such as non-rural water supplies and uses, cultural and biota values, land use change, agriculture production, regional economics etc. This work will provide a broader picture of the supply and demand elements of the valley's water resource. This work will be completed in August 2018.

10. Consideration of climate change

The matters addressed in this report have been considered by officers in accordance with the process set out in the GWRC Climate Change Consideration Guide.

10.1 Mitigation assessment

Mitigation assessments are concerned with the effect of the matter on the climate (i.e. the greenhouse gas emissions generated or removed from the atmosphere as a consequence of the matter) and the actions taken to reduce, neutralise or enhance that effect.

Officers have considered the effect of the matter on the climate. Officers recommend that the matter will have an effect that is not considered significant.

Officers note that the matter does not affect the Council's interests in the Emissions Trading Scheme (ETS) or the Permanent Forest Sink Initiative (PFSI)

10.2 Adaptation assessment

Adaptation assessments relate to the impacts of climate change (e.g. sea level rise or an increase in extreme weather events), and the actions taken to address or avoid those impacts.

GWRC plans for climate change in assessing the degree of future flood hazard and in determining an appropriate response. There are only specific, limited situations in which climate change is not relevant (for example, planning for present-day emergency management).

In assessing flood hazard and determining appropriate structural and/or nonstructural responses in areas subject to flood risk, GWRC is applying a rainfall increase of 20% to the flood hydrology in the FMP to account for climate change over the next 100 years.

Guidance from the Ministry for the Environment will be updated from time to time and our approach will be revised in line with any updates.

11. The decision-making process and significance

No decision is being sought in this report.

11.1 Engagement

Engagement on this matter is unnecessary.

12. Recommendations

That the Subcommittee

- 1. **Receives** the report.
- 2. Notes the content of the report.

Report prepared by:

Report approved by:

Report approved by:

Report approved by:

Francie Morrow Project Manager – Floodplain Management Plans Mark Hooker Senior Project Engineer – Floodplain Management Graeme Campbell Manager, Flood Protection **Tim Porteous** Acting General Manager, Catchment Management





 Report
 2018.179

 Date
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CommitteeWairarapa CommitteeAuthorDavid Boone, Manager, Land Management

One Billion Trees Programme - Opportunities in the Greater Wellington Region

1. Purpose

The purpose of this report is to:

- Update the Committee on recent developments relating to the One Billion Trees Programme (1B Trees); and
- Inform the Committee of how Greater Wellington Regional Council (GWRC) will engage with the 1B Trees.

2. Background

This report was prepared originally for the Environment Committee. This version contains the same information held in Report 2018.102.

2.1. Overview

The 1B Trees is a ten-year investment plan, and one of three investment tiers of government's Provincial Growth Fund which aims to enhance economic development opportunities, create sustainable jobs, enable Māori to reach their full potential, boost social inclusion and participation, build resilient communities, and help meet New Zealand's climate change targets.



1B Trees is intended to result in a substantial increase in the area of land planted in, or allowed to regenerate into, woody vegetation. 1B Trees

OPPORTUNITIES RELATING TO PROVINCIAL GROWTH FUND AND ONE BILLION TREES

recognises that such land uses can bring a range of social, economic, environmental and cultural benefits to communities. The overarching theme of 1B Trees is succinctly captured in the phrase, "*the right tree, in the right place, for the right purpose*". If this is achieved, then 1B Trees will help to:

- Diversify income
- Invest in the future
- Improve land productivity
- Tackle environmental issues like erosion
- Reduce the effects of climate change
- Improve water quality
- Moderate river flows
- Provide important habitats for a range of native species
- Enhance natural landscapes
- Create jobs

2.2. 1B Trees funding policy

GWRC staff attended a 1B Trees funding policy workshop hosted by Ministry for Primary Industries (MPI) senior staff on 3 May 2018. MPI anticipates completion of 1B Trees funding policy by mid-2018. There are many challenges around building a 1B Trees funding policy framework that will maximise the success of the core purpose, "the right tree, in the right place, for the right purpose". Key policy issues include:

- Overarching alignment with the NPS-FM (National Policy Statement for Freshwater Management) and NESPF (National Environmental Standard for Plantation Forestry)
- Funding balance between 1) funds allocated to Crown Forestry joint ventures vs. 2) other 1B Trees supported programmes (e.g. our Wellington Region Erosion Control Initiative (WRECI) Hill Country Erosion programme, other new Regional Council work-streams developed through 1B Trees funding bids, or private sector or NGO opportunities to achieve tree planting)
- Streamlining and further incentivising existing 1B Trees programmes, including the Afforestation Grant Scheme and the Hill Country Erosion programme
- Consideration of incentive packages with potentially higher grant rates for native trees to incentivise against the economic popularity of pines, and additional criteria for sustainable pine funding. For example, roading infrastructure requirements and appropriate land use capability assessment

• Appropriate funding streams for the entire tree planting supply and delivery chain, such as labour force development, nurseries, research and development to assist planting and land use capability science.

MPI has indicated that 1B Trees funding applications that have already been received will be given a high level of scrutiny and may be held until such time that the policy framework described above is complete. This policy development is complex, and once finalised by MPI it is expected that competent applications for 1B Trees funding will require significant planning work. Therefore, there is no urgency for 1B Trees applications to be submitted to MPI at this early stage of the programme.

3. Alignment with GWRC's programmes

The intent of the Provincial Growth Fund and 1B Trees aligns well with GWRC's goals for the Region around social, cultural, economic and environmental outcomes.

In particular, 1B Trees is a good fit with our objectives relating to land management, biodiversity and flood protection. The recommendations of the whaitua committees could be achieved at a faster rate.

3.1. Regional Whaitua outcomes

Many of our Region's community-led whaitua processes are indicating that there is strong alignment with 1B Trees drivers.

The Ruamāhanga Whaitua Committee is due to release its implementation plan in 2018, and, following a plan change process, could be operable by as early as 2020. The Committee's recommendations will include strong recommendations for widespread riparian planting, significantly increased planting on erosion prone hill slopes, and headwater retirements of erosion prone land in order to enable catchment communities to meet sediment limits for individual Freshwater Management Units (FMU).

The Porirua Harbour Whaitua process is underway and likely to release its implementation plan by 2019. Managing sedimentation in the Porirua Harbour is a major challenge. Mitigation of sediment generation on rural land, including GWRC park land, will involve a mix of planting riparian and hill slope areas, and general afforestation.

The Eastern Wairarapa Whaitua will be the last of the Region's five whaitua areas to commence its community lead planning process. This is likely to commence in 2021. Given that this whaitua area is dominated by high erosion risk hill country, it is likely that tree planting as a form of mitigation will form a big part of any implementation plan. Erosion control programmes are already active and have been for many decades in the Region through programmes such as WRECI and its predecessors. This Whaitua will be well placed, timing wise, to engage with the later part of a ten-year 1B Trees effort.

3.2. Existing Greater Wellington 1B trees programmes

The existing MPI-supported Hill Country Erosion programmes across the country are now being administered by MPI under the umbrella of 1B Trees.

In our Region, the (WRECI) programme is currently operating under contract with MPI for a term ending on 30 June 2019. The WRECI contract renegotiation with MPI is being planned now and will take effect on 1 July 2019. This will allow a direct avenue to engage with 1B Trees by expanding the WRECI programme in order to achieve better outcomes aligned with 1B Trees' objectives, and with regional Whaitua objectives.

3.3. Our partnership with mana whenua

GWRC officers have started conversations with Wairarapa mana whenua Chairs on their economic development ideas and interests relating to 1B Trees opportunities.

The proposed Natural Resources Plan confirms mana whenua support for a number of guiding principles in managing our natural resources. Of particular relevance to this project is the Mahitahi Partnership between GWRC, iwi and the community, based on a commitment to active engagement, good faith and a commonality of purpose.

We are aware that mana whenua across the country are working on proposals with relevant councils and other stakeholders. This includes the Ngati Kahungunu ki Heretaunga who has partnered with the Hawkes Bay Regional Council and territorial authorities with their collaborative proposal to this fund. GWRC officers have participated in a presentation to iwi members and two Wairarapa Mayors.

Ngāhiwi Tomoana (Chair of Ngāti Kahungunu Iwi Incorporated) shared an overview of their proposal for consideration by Ngāti Kahungunu ki Wairarapa and councils in our Region as background for any submission we may make. Ngāhiwi confirmed that they and their Regional Council partners would be happy to present their proposals to GWRC if required.

In summary, their proposal:

- Targets 250,000 hectares of low productivity land
- Identifies projected returns on investment to landowners and investors
- Specifies 50% native, 25% harvestable and 25% long term planting
- Focuses on carbon credit opportunities and returns
- Identifies increased infrastructure needs, e.g. roading, port facilities and employment opportunities
- Projects significantly improved environment outcomes
- Acknowledges the challenges of sourcing sufficient numbers of ecosourced seedlings for the programme.1

¹ Ngati Kahungunu ki Wairarapa "Kahuntia Accord" 26 March 2018

4. How to engage with the 1B Trees programme?

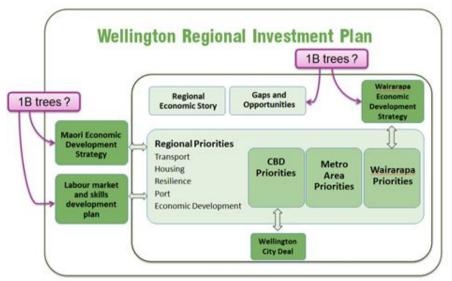
1B Trees is stimulating considerable interest in the community, as multiple potential benefits are recognised around economic, environmental, social and cultural outcomes. There are many sectors of the community that will wish to seek funding from the 1B Trees programme. However, a fragmented approach to funding bids may put good outcomes at risk and MPI has expressed its desire to see a high degree of coordination at the regional level.

This provides an opportunity for GWRC to demonstrate regional leadership. The question then becomes, what is the best vehicle for providing this coordination role?

GWRC is currently project managing the development of a Wellington Regional Investment Plan (WRIP). This includes a Wairarapa Economic Development Strategy.

The WRIP will likely form the main mechanism for discussions with the Crown aimed at accessing the Provincial Growth Fund. Including regional 1B Trees opportunities, planning in a comprehensive Regional Investment Plan will mean that multiple parties will be part of developing, and would "own", such a proposal, which is likely to give it a greater regional coordination.

A visual display of where 1B Trees planning could sit within the WRIP is shown below:



Draft Regional Investment Plan diagram

The WRIP project is being managed by GWRC through the Wellington Regional Strategy (WRS) Office, with a steering group of senior managers from all councils, Wellington Region Economic Development Agency (WREDA) and the New Zealand Transport Agency (NZTA). Council CEOs are providing guidance to the project and the project team regularly reports to the Mayoral Forum and WRS Committee.

4.1. 1B Trees engagement coordination

Engagement with 1B Trees, having relevance to a number of GWRC functions, will require officers from across GWRC to contribute to a coordinated planning effort. In addition to internal coordination, any regional planning will involve iwi partners, territorial authorities, and other relevant stakeholders in the sector. The WRIP, including 1B Trees alongside other PGF opportunities, is considered to be the best mechanism to coordinate this regional approach for preparing a PGF funding bid.

In addition to the regional coordination process being led by the WRIP, it is intended that the Land Management Department will develop 1B Trees opportunities within the capabilities of expanding the existing WRECI programme which may lead to a bid for PGF/1B Trees funds as part of the WRECI contract extension application in early 2019. Land Management staff, while developing WRECI expansion opportunities throughout 2018, will be in contact with the WRIP team. It is likely that it will be more sensible to manage the WRECI component of 1B Trees engagement through the Land Management Department, whilst planning wider regional 1B Trees opportunities through the WRIP project. Budget capacity to expand WRECI is already available in GWRC's LTP. The degree of programme expansion is dependent on MPI's completion of 1B trees funding policy.

5. Recommendations

That the Committee:

- 1. **Receives** the report.
- 2. Notes the content of the report.
- 3. Notes that GWRC's engagement with the 1B Trees is developing in two fronts:
 - 1) By the Land Management Department developing appropriate expansions of the existing WRECI programme, and
 - 2) Co-ordinating regional opportunities as part of the Wellington Regional Investment Plan.
- 4. **Notes** that further updates to the Committee will be provided following *MPI's* completion of 1B Trees funding policy.

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