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**Committee** Te Kāuru Upper Ruamahanga River Floodplain Management  
Subcommittee  
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## Rural river options development (A framework)

### 1. Purpose

To update the Subcommittee on progress with development of flood and erosion risk management options across the rural river reaches on the Waingawa, Waipoua and Ruamahanga Rivers.

To seek endorsement from the Subcommittee for the high-level options framework of tools and responses for managing flood risk within the catchment and to seek direction from the Subcommittee that this can now be drafted to present as a draft Flood Management Plan (FMP) document for review and development by the Subcommittee.

### 2. Background

Following on from earlier workshops that looked at the values and issues of the rivers in the FMP area a series of three fieldtrips/workshops were held to refine the range of management options available to manage and mitigate the flood and erosion issues identified. The field trips allowed Subcommittee members the opportunity to see various sections of the river for themselves and to hear and contribute to discussion around the tools being recommended and how they could fit together to provide a comprehensive framework within which to deliver the vision and aims of the FMP.

Each fieldtrip was followed up with a facilitated workshop to allow Subcommittee members to assess the management tools available against the overarching aims of the FMP using a Multi Criteria Analysis (MCA) tool. This process is iterative and at this stage there is no hierarchy in the MCA with all criteria having equal importance.

The overarching aims of the FMP were distilled into a series of questions that help assist understanding of how each tool or specific response can deliver the intended outcomes;

### **Economic**

- Is it affordable (now and into the future)?
- Does it reduce likelihood of loss to private property, business, and agriculture?
- Does it enhance or reduce the risk to essential public infrastructure?

### **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 risk of the community?

### **Cultural**

- Are cultural values recognised?
- Does it recognise the interconnectedness of natural systems?

### **Natural Spaces**

- Does it improve natural values/character?
- Does it improve natural processes/ecology?

### **Community Needs/Amenity**

- Does it improve river access?
- Does it improve recreational safety?
- Does it respond to community aspirations?

## **3. Workshop Summaries**

This section provides a brief summary of the key points taken from the workshops held since March of this year. Full notes of all three workshops are available as **Attachments 1-4**, enclosed with this report.

For each of the workshops invitations were extended to additional community members who brought their local perspectives and opinion to inform the discussion.

### **3.1 Waingawa**

#### **3.1.1 Site Visit**

A number of additional community members attended the site visit and workshop – Phil Teal (Fish & Games), Ross Cottle (Waingawa Scheme Chair), David Hopman (Masterton District Council), Gary Baker (Carterton District Council).

Three specific locations were visited and a number of specific topics were discussed:

***Taratahi Water Race*** – The lowering river bed is a significant issue in this location, impacting on the operation and future viability of the Taratahi water race (operated by CDC). CDC carryout in-river work to try and maintain flow into the race. MDC’s untreated water supply pipeline is situated immediately downstream of this location and could be placed at risk if the river alignment was altered through maintenance work or flood events.

***South Masterton Stopbank*** – This stopbank provides a level of protection to the Southern part of Masterton but is located very close to the channel, within design channel. Stopbank is covered in rough vegetation and willow trees and is, anecdotally, of poor construction.

***Contractor yard downstream of SH2*** – The area around the two Waingawa bridges has a long history of gravel extractions; hence the establishment of a number of Contractors yards in this location. The river bed in this area contains demolition like material and the area is generally considered to be of poor visual quality. This location forms part of the gateway to Masterton from the south.

### 3.1.2 Workshop

The MCA workshop was held after the site visit. Reaches of the Waingawa were considered individually, looking at both the Common Tools and Site Specific responses to address the previously identified major flood hazard and river management issues.

The MCA was applied at a reach scale. The full range of proposed tools and responses were assessed as a package to see if the they;

- Had potential flaws
- Achieved the criteria set out

In some circumstances a definitive conclusion could not be reached and required further information.

Notes from the analysis can be found in **Attachment 1**.

## 3.2 Ruamahanga (Mt Bruce, Te Ore Ore and Gladstone)

### 3.2.1 Site Visit

Three specific locations were visited and a number of specific topics were discussed:

***Rathkeale College, (Mt Bruce)*** – The stopbanks in this location are too close to the river and the river buffers on both sides are narrow. This leads to a relatively high level of instream machine work to maintain adequate protection to the school. Addressing the issues raised here is considered a high priority – multi response approach is required to improve security and river management activities.

***David Holmes Property, (Te Ore Ore)*** – The issues around buffer areas and management of buffer vegetation were discussed along with the sharing of the landowner’s personal experiences of flooding.

***Michael Williams Property (Gladstone)*** - Examples of the use of buffer strips and vegetation planting. The Subcommittee were shown the Giant Willow Aphids, which have infested most of the willow in the schemes. The long term effects are unknown, but it highlights the issue of reliance upon monoculture planting, and there have been instances of other infestations threatening willows in the past. Planting of willow poles can be effective, but the situation needs to be right to ensure maximum potential for success.

### 3.2.2 Workshop

The workshop focussed on some of the Common Tools that are intended to be applicable to all managed river reaches;

- River Buffers (Banks)
- River Buffers (Beds)
- Pool, Riffle and Run
- Retreat or retirement of Assets

A high level MCA was conducted to set out the pros and cons for each under the headings of Economy, Resilient Communities, Cultural, Natural Space/Processes and Community Needs. Further details can be found in the workshops notes provided as **Attachment 2**.

## 3.3 Waipoua

### 3.3.1 Site Visit

Ron Garrod (Waipoua Scheme Chair) and Alistair Miller (Scheme member) provided some of their views and experiences whilst on the site visit. Derek Neale (Mt Bruce and Kopuaranga Scheme member) attended the workshop to convey his views on scheme governance and development of the FMP.

Three specific locations were visited and a number of specific topics were discussed;

***Miller Property*** – This section of the river was straightened significantly around the 1940/50s and Alistair commented that this section had been seen as the best way to manage the river. It has been relatively stable for a long period of time. There is limited buffer vegetation and most protection work involves mechanical gravel movement supported by willow planting.

**Lochore Property** – The River is approaching the outside design line at this location which has resulted in gravel groynes being constructed to try and move the river away from the bank and allow for establishment of willows. Gravel groynes are a temporary fix that provide some increase in resistance along the river bank, but are not intended for use as a long term management tool.

**Garrod Property** – Ron welcomed the Subcommittee to his property on Matahiwi Road. This location is susceptible to flooding from relatively low level floods and there are a number of rural stop banks bounding the river on either side of the river in this reach. Many of these stop banks, like others in the area, are too close to the river and actually sit within the current identified river buffer area. A section of the stopbanks was relocated further back from the river around 10 years ago; this moved these sections outside the design channel alignment. Most of the existing stopbanks date from the early years of the Wairarapa Catchment Board (about the late 1940s to early 1950s).

### 3.3.2 Workshop

Key topics discussed during this workshop included:

- Governance and Funding
- Mixed vegetated planting
- Emergency Management
- Private bridges across the river
- Community groups

Further details can be found in the workshops notes provided as **Attachment 3**.

## 4. Key Tools and Recommendations

This section summarises the key tools presented to the Subcommittee over the last 18 months that have been discussed and analysed during the recent workshops. The tools and responses identified below, together with the issues, values and aims, will form an FMP framework from which the draft FMP document can be developed.

It is considered that all of the tools or responses presented below have a part to play in achieving the Floodplain Management Vision:

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

### 4.1 Common Tools

Commons Tools are identified as measures that are considered to be applicable to the Waipoua, Waingawa and Ruamahanga Rivers and to a lesser extent the Kopuaranga, Whangaehu and Taueru Rivers. Each has been assessed to address particular aspects of the issues, visions and aims of the FMP.

A summary of the current framework of tools and responses and how they apply to the different rivers is provided as **Attachment 4**

#### 4.1.1 Operation Maintenance Tools

- (a) River edge envelopes & historic channel lines
  - Including review and confirmation of design channel alignments
  - Confirmation of use of vegetated buffers
  - Production of public maps that include outer buffer line and historic channel extent information
- (b) Pool, Run, Riffle envelopes & river bed envelopes
  - Definition of a target number of pools, runs and riffles at a reach scale (to be informed and align with code of practice methods)
  - Definition of river bed envelopes that act as triggers for decision making
  - Definition of review periods and link to river bed level triggers
- (c) Policy development (including; Rural stopbank, Code of Practice, Scheme Decision Making)
  - Definition of rural stopbank level of service and condition rating
  - Guidance of code of practice methods within FMP
  - Simplification of governance framework
  -
- (d) Abandonment/Retirement of Assets
  - Redundant assets located within buffer areas to be abandoned or retired.
  - Critical assets to be protected or relocated dependant on what is being protected.
  - Policy to be developed outlining abandonment/retirement process.
- (e) Mixed vegetation planting
  - Guidance notes to inform code of practice about new business as usual approach for maintenance works, indicating acceptable methods of vegetation planting that mix native and exotic species
- (f) Isolated works fund (expanded to include isolated erosion works in Eastern rivers)
  - Refinement of existing isolated works policy
  - Amendment of policy specific to eastern rivers to enable use of isolated works policy to address erosion issues within scheme boundaries (scheme only targets flood conveyance capacity of channel and does not rate for erosion protection)
- (g) Public ownership of river margins
  - Establish long term aim of bringing land within buffer areas into public ownership (through use of District Plan rules and voluntary sale/purchase)

#### 4.1.2 Environmental Enhancement Tools

- (a) Environmental Strategy
  - Development of an environmental strategy to define community vision for the catchment
  - Identification of specific projects and initiatives to enable this vision
- (b) Position statement in support of maintaining/ enhancing the values of the upper catchments (No specific intervention intended)
  - Statement that can be used to show support for projects that will contribute to FMP outcomes.
- (c) Community support officer position established
  - Creation of a river ranger type role that will provide community support and policing of dumping at river access locations
- (d) Fund established for support of community projects
  - Creation of a contestable fund that helps deliver community and environmental outcomes of the FMP.
- (e) Care groups and Discussion groups
  - Support the creation of groups that focus on certain activities or areas of the catchment to deliver and monitor implementation of FMP outcomes.

#### 4.1.3 Planning Tools

- (a) Land use control recommendations (enabled through combined District Plan)
  - Recommendation of district plan hazard overlays that control development with respect to flood hazards
  - Raise awareness of natural hazards within the community

#### 4.1.4 Emergency Management Tools

- (a) Community and Emergency management preparedness support information
  - Provide information and interpretation support for WREMO to assist with the understanding of flood hazards

### 4.2 FMP Responses

FMP responses are generally more specific in nature than the Common Tools, noted above. They have been developed based on specific location requirements. They broadly align with what method of risk management approach each is trying to achieve (Avoid, Prevent, Manage, and Accept).

#### 4.2.1 Major project response (Prevent)

The major project response identifies any option that would be considered as a major, permanent fix to an issue. They are generally a one off project that has a high cost to implement but that would last many years with reduced ongoing maintenance in comparison to an operational type response.

#### 4.2.2 Operational response (Manage)

An operational response is one that will require ongoing, scheduled or responsive approach to an issue. They are not intended to be permanent in nature and are generally of low, but continual ongoing cost.

#### 4.2.3 Policy or planning response (Avoid)

A policy or planning response is a method used to tackle or prevent an issue from occurring through a form of statutory process. These options would generally be implemented through a regional or district plan.

#### 4.2.4 Community response (Accept)

A community response is one where the main implementer of the option is the community, generally but not always supported by another agency. This includes options like flood warning, forecasting, and emergency response, all of which are supported by WREMO, but reliant on the behaviours of the community in response to information or an event.

### 5. Translating a Framework of Tools into an FMP

Over the last 18 months a wide range of options and tools have been identified, discussed and assessed to remove or mitigate a range of flood, erosion and river management issues within the floodplain of the FMP catchment.



The preferred option is a combination, or framework, of Common Tools and FMP responses that are considered to provide the best opportunity to manage the river and wider floodplain in a way that achieves the vision and aims set out by the FMP.

At the recent series of workshops the Subcommittee has indicated their desire to formally confirm the options that are considered to best fulfil the TKURFMP aims. The Subcommittee has developed these options during this



workshop series and these will be used to form the first comprehensive draft of the Te Kāuru Upper Ruamahanga Floodplain Management Plan.

### **5.1 Developing the FMP**

Officers will now start preparing a draft FMP. This draft will then be discussed with the Committee and reviewed to ensure that it is fit for purpose before being used as the basis for public consultation.

In parallel to preparing the early draft FMP, a series of focussed consultation events will be held to discuss some of the key aspects being proposed with particular interest groups, stakeholders and partners. Feedback will be presented to the Subcommittee.

## **6. Governance and Funding**

Governance and Funding is inextricably linked to the delivery of the FMP. At their recent annual scheme meetings the existing river management scheme committee members were presented with a vision of a potential new governance structure. Refer to Project Managers Report, 16.270.

The next identified opportunity to discuss this with scheme representatives will be the annual Scheme Chairs meeting, likely to be held in August.

## **7. The decision-making process and significance**

Officers recognise that the matters referenced in this report may have a high degree of importance to affected or interested parties.

The matter requiring decision in this report has been considered by officers against the requirements of Part 6 of the Local Government Act 2002 (the Act). Part 6 sets out the obligations of local authorities in relation to the making of decisions.

### **7.1 Significance of the decision**

Part 6 requires Greater Wellington Regional Council to consider the significance of the decision. The term ‘significance’ has a statutory definition set out in the Act. Officers have considered the significance of the matter, taking the Council's significance and engagement policy and decision-making guidelines into account. Officers recommend that the matter be considered to have low significance, as at this stage it is setting out a high level framework.

### **7.2 Engagement**

Engagement on the matters contained in this report aligns with the level of significance assessed. This framework has been developed in consultation with community representatives as set out in this report.

## **8. Recommendations**

*That the Subcommittee:*

- 1. Receives the report.*

2. *Notes the content of the report.*
3. *Endorses the high-level options framework including tools and responses for managing flood risk within the catchment.*
4. *Requests that officers proceed with development of the outlined preferred option framework to produce a draft FMP.*

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**Attachment 1: Waingawa Workshop Notes**

**Attachment 2: Ruamahanga Workshop Notes**

**Attachment 3: Waipoua Workshop Notes**

**Attachment 4: Draft Summary of the framework of FMP Tools and Responses**