Ruamāhanga Whaitua Committee

greater WELLINGTON REGIONAL COUNCIL Te Pane Matua Taiao

Title: River management in the Ruamāhanga whaitua

Purpose: To describe the current regulatory and non-regulatory methods for river management in the Ruamāhanga whaitua

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River management in the Ruamāhanga whaitua

Contents

1. Purpose

This report has been prepared for the Ruamāhanga Whaitua Committee (the Committee) to describe the current regulatory and non-regulatory drivers of river management within the whaitua. This information will assist the Committee in identifying issues for river management to be addressed by recommendations in the Whaitua Implementation Programme (WIP).

For the purposes of this report, 'river management' activities are those activities undertaken in the beds of lakes, rivers and streams. This includes activities such as gravel extraction, works to alter bed levels and channel shape, in-stream and bank edge vegetation management, beach grooming and ripping, the use of rock and physical structures located in the bed or bank edge. Depending on how broadly the concept is considered, river management also includes activities associated with drainage programmes such as vegetation clearance and maintenance of drain/stream form.

This report briefly sketches the history of river management in the Ruamāhanga valley and the impacts of river management activities, and then outlines the current regulatory and non-regulatory approaches to river management in the whaitua. This includes a summary of the key provisions in the Proposed Natural Resources Plan, major consented river management activities and other drivers of in-river management practice.

1.1 What's the background?

River management activities typically focus on mitigating flooding and erosion of river beds and banks in order to protect settlements and public and private assets. Most particularly in the Ruamāhanga whaitua, river management has focused on preventing erosion of land used intensively for farming.

River management activities help provide the conditions for economic wellbeing through the ongoing use and development of land protected from flood and erosion risk. However, river management activities may negatively impact in-river values and the way communities use water for cultural, spiritual and recreational purposes. For instance, controlling river channel design in order to minimise erosion can lead to river stretches that lack the variety and combination of riffles, runs and pools suitable for sustaining healthy native fish populations, or may result in few pools suitable for people to swim in.

River management activities in the whaitua began in earnest following conversion of the valley floor to farm land during the 19th century. River management programmes and practices in the whaitua over the past 150 years have included restricting river corridors, changing and maintaining river channel alignments, controlling water levels in Lake Wairarapa, constructing stopbanks and extracting gravel. Smaller works include vegetation removal from large and small rivers and the use of in-stream erosion protection structures.

In the 1950s the Government established the Wairarapa Catchment Board in order to achieve its objectives for coordinated river control. This included rerouting the Ruamāhanga River away from Lake Wairarapa, constructing the Barrage gates and eventually draining large parts of the lower valley. In the 1980s, further river management schemes were established along the major river corridors of the whaitua.

Today the Wellington Regional Council (WRC) is responsible for the implementation and maintenance of these schemes.

1.2 What's the policy context?

The management of activities in the beds of lakes and rivers is directed or influenced by a range of legislation. The two key legislative policy contexts are described below.

Resource Management Act 1991

Under the Resource Management Act 1991, WRC has responsibility for managing natural hazards, including managing the use of land to avoid or mitigate flooding[1]. Activities undertaken in the beds of lakes and rivers are regulated by the Resource Management Act 1991 (RMA).[2] River management activities, such as for the purposes of erosion, drainage and flood mitigation, require consent under the Regional Freshwater Plan or Proposed Natural Resources Plan (the proposed Plan) unless specifically permitted. This includes activities undertaken by WRC Flood Protection for community flood protection purposes.

Soil Conservation and Rivers Control Act 1941

Under the Soil Conservation and Rivers Control Act 1941 (SCRCA), it is the function of WRC to minimise and prevent damage by floods and erosion.[3]

The SCRCA is an enabling Act so does not require WRC to take specific actions; how WRC fulfills these functions is not set by the legislation. However, once a river management scheme is established under the SCRCA, it must be continued unless WRC goes through a special consultative process to withdraw from the scheme. WRC may also undertake activities in relation to drains and watercourses to maintain 'efficiency' in drainage systems[4]. Since the 1990s, WRC has implemented these functions by undertaking a floodplain management planning approach.

National Policy Statement for Freshwater Management 2014

Prepared under the RMA, the National Policy Statement for Freshwater Management 2014 (NPS-FM) directs the safeguarding of the life-supporting capacity, ecosystem processes and indigenous species, including their associated ecosystems, of fresh water. Regional councils are required to give effect to the NPS-FM and its directions. The WRC has established the whaitua process as the mechanism by which communities will identify how to achieve the requirements of the NPS-FM.

The NPS-FM deals primarily with water quality and quantity and not directly with river management activities. However, the NPS-FM requires regional councils to develop freshwater objectives which may include values that are associated with the condition of the beds of lakes and rivers. Further, methods by which water quality and quantity objectives are achieved could include river management activities such as flow control and channel design.

[1] See s30 http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM230265.html
[2] See s13 http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231970.html
[3] See s126 http://www.legislation.govt.nz/act/public/1941/0012/latest/DLM230365.html
[4] See the Land Drainage Act 1908 http://www.legislation.govt.nz/act/public/1908/0096/latest/DLM160977.html

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2. RMA regulatory-driven river management

2.1 Proposed Natural Resources Plan

The Proposed Natural Resources Plan (the proposed Plan) was publicly notified in July 2015. The proposed Plan has region-wide objectives, policies and rules for the management of water quality and activities in the beds of lakes and rivers. These provide direction in respect to in-stream values (mauri, ecosystem health, recreation and natural character) and the value of protecting the safety of people, property and infrastructure from natural hazards including flood hazard.

The proposed Plan provides a regulatory framework for managing activities in the beds of rivers and lakes. The regulations most relevant to the Ruamāhanga whaitua can be summarised as follows:

- **Providing for small-scale in-river activities**
  A set of general conditions for all permitted activities (R112-R119) in the beds of lakes and river (e.g. clearing flood debris) that focus on managing the effects of activities on water quality from small-scale activities in accordance with good management practice principles.

- **Regulating large-scale in-river activities**
  River management activities that do not meet permitted activities rules require resource consent (mostly under Rule R129).

- **Managing gravel extraction**
  Small-scale gravel extraction operations (less than $50m^3$) are generally permitted activities (do not require consent) (Rule R120). Consent is required for larger and in-stream extraction and the policy approach (Policy P103) to manage effects of extraction on flood and erosion risk in fresh and coastal water, and to ensure extraction rates don't exceed the rate of supply. The benefits of gravel extraction from rivers for flood protection and control purposes are recognised (P7).

- **Undertaking vegetation clearance and altering channel in drains and highly modified streams**
  These activities are permitted by two rules (R121-R122) with a detailed set of conditions that describe good practice. Though these rules have many conditions, this approach aims to avoid farmers/operators needing to get consent by being very clear about how impacts on ecological values should be managed. This approach is also supported by a method (M14) to develop education programmes around vegetation clearance good practice.

- **Recognising catchment based flood and erosion control activities**
  The proposed Plan recognises the ongoing operation of existing catchment based flood and erosion risk management activities are beneficial and generally appropriate (Policy P15) and the benefits of new catchment based flood and erosion risk management activities are recognised (Policy P16). Structures that form part of catchment-based schemes are protected from damage from other activities (P104).

- **Providing for fish passage**
  The RMA requires protection of the significant habitats of indigenous fauna (s6(c)). Seven of the 12 indigenous species that inhabit rivers in the Ruamāhanga catchment must migrate as juveniles between the sea and rivers where they live as adults. Activities in rivers such as building weirs can prevent or limit migration and the ability of fish species to live in available upstream habitat. Policy 34 of the proposed Plan states the construction or creation of new barriers to the creation of fish and koura species shall be avoided.

  The RMA (s7(h)) also requires particular regard to be had to protecting trout habitat, Policy P106 sets direction on the management of activities in rivers with recognised trout habitat (these are identified in Schedule I). In the whaitua, rivers as having 'important trout fishery' values are the Huangarua, Kopuaranga, Ruamāhanga, Taueru, Waingawa, Waiohine and Waipoua rivers; identified locations of 'important trout spawning waters' are identified on the Ruamāhanga, Kopuaranga, Waipoua, Waingawa, Waiohine and Huangarua rivers, the Mangatarere and Papawai streams.

2.2 Major consented river management activities

There are many river management activities in the Ruamāhanga that have been issued resource consent, mostly under the operative Regional Freshwater Plan (not the proposed Plan, as discussed above).

The most significant of these consents are the 'global' consents associated with activities undertaken by WRC Flood Protection in the major river systems. For these consents, WRC is both the authorising agency issuing the resource consents and the operational agency undertaking or overseeing the river management activities authorised by the consent. These consents cover activities including gravel extraction, bed re-contouring and the use of hard structures to manage bank erosion. Major river management activities in the Ruamāhanga whaitua with consents (or consent applications) are listed in Table 1.

Table 1. Major consented river management activities in the Ruamāhanga whaitua

River(s)	Activity	Consent number	Status	Expiry date
'Area 1': beds and banks of the Ruamāhanga River above the confluence with the Waiohine River; the Waiohine River and some tributaries; and six drainage schemes in the Upper Ruamāhanga	Construction and maintenance of structures	WAR150231	Application lodged, replacing WAR000363, WAR000364, WAR000365 and WAR130142	NA, not yet granted
	Establish and maintain plantings and river bank protection, channel management and maintenance activities including bed re-contouring			
'Area 2': dry beaches in the Lower Valley; and Ruamāhanga River below the confluence with the Waiohine River	Gravel extraction from dry beaches			

Ruamāhanga River system including tributaries	Gravel extraction	WAR990026	Granted 2014	May 2016
Lake Wairarapa	Dam and diversion by Barrage Gates	WAR930149	Granted 1999	February 2019
Pouawha Pump Drainage Scheme	Discharge from pumped drainage scheme to Ruamāhanga River	WAR780029 01	Granted 1978	October 2026
Fresh water bodies and coastal water covered by the Lower Valley Drainage Scheme	Various activities associated with flood protection, including construction and maintenance of structures, bed and bank disturbance, gravel extraction	WAR070049	Granted 2013	September 2027

2.3 Major consent renewals

In March 2015, WRC Flood Protection lodged a replacement resource consent application for the existing 'global' resource consents for the Upper Wairarapa Valley, merging existing gravel and individual river consents into one application (see WAR150231 identified in Table 1 above).[5] The application seeks that these consents are granted for the maximum period of 35 years.

Key features in the consent application for the management of adverse effects from river management activities that would be authorised by the 'global' consent include:

- A new region-wide Code of Practice[6], this is discussed in Section 3.4 (below), and
- A monitoring programme and adaptive management framework to drive change in practice as circumstances change or impacts of activities are identified, and
- An independent review process to review river management practice and that reports to the WRC Environment Committee

The old global consents were applied for in the context of management plans prepared some 15 years ago. The new resource consents are being applied for in the context of the Te Kauru and Waiohine floodplain management planning (FMP) processes.[7] The new consent includes a series of tools that will be used according to the outcomes expressed

[5] Note these consents were applied for under the operative Regional Freshwater Plan (RFP) and before the proposed Plan was notified. This means that the rule framework of the RFP, and the policy framework of both the RFP and proposed Plan, apply to the resource consent application. The application for these works with further detail can be found here: http://www.gw.govt.nz/assets/Our-Services/Flood-Protection/WGNDOCS-1441254-v1-ApplicationDocument-WorkingDRAFTV3-SENTOUT21-12-14.pdf

[6] http://www.gw.govt.nz/assets/Our-Services/Flood-Protection/WGNDOCS-1162876-v14A-DRAFTCodeofPracticeandEnvironmentalMonitoringforFloodProtectionactivitiesCombinedDoc.pdf

[7] Currently in progress with subcommittee/advisory committee reporting to the GWRC Environment committee

in the FMPs. The FMP process determines the mix of tools for each river stretch that the consent application will cover. WRC uses the FMP process to support the subsequent resource consent application. The FMP process sets the direction of the consent application, not the other way around.

3. Other drivers of river management

3.1 Floodplain management planning

Since the 1990s WRC has been working to improve its river management practices in conjunction with communities through floodplain management planning processes. Recently WRC has initiated a programme of floodplain management planning across the Ruamāhanga whaitua to bring a coordinated approach to a range of activities that affect flood hazard risk within certain rivers. This process brings together high level planning across a number of the existing flood schemes. The three FMP areas in the Ruamāhanga and how they correspond to the existing schemes are shown in Table 2.

Table 2. River schemes and floodplain management plan areas in the Ruamāhanga whaitua

Scheme name	Floodplain management planning area	Progress of floodplain management planning process
Kopuaranga	Te Kauru – Upper Ruamāhanga[8]	Began 2012, Phase 1 – Gathering and reviewing local information complete Currently in Phase 2 – Developing solutions
Upper Ruamāhanga – Mt Bruce		
Waipoua		
Whangaehu		
Upper Ruamāhanga – Te Ore Ore		
Waingawa		
Taueru		
Upper Ruamāhanga – Gladstone		
Waiohine[9]	Waiohine[10]	Began 2009, all phases of development complete Draft FMP anticipated to be released for comment mid-2016
Lower Valley	Lower Valley	Scoping stage only

FMPs are a non-statutory tool for investigating how to manage flood and erosion risk by looking across values and priorities in a catchment to identify flood management objectives. FMP processes aim to understand the impact of flooding on a community's values, examine options for managing these impacts and then identify the preferred

[8] For further details: http://www.gw.govt.nz/te-kauru-upper-ruamhanga-floodplain-management-planning/
[9] Excludes the Mangatarere River
[10] For further details: http://www.gw.govt.nz/waiohine-river-floodplain-management-plan/

options to inform future practice (WRC 2015). Directing future river management activities are an integral part of the FMP processes, as well as identifying structural (e.g. stop bank) and land use planning options to manage flood and erosion risks.

3.2 River schemes

WRC oversees flood management schemes on ten river systems in the whaitua (see Figure 1). Typically, river management activities undertaken as part of a scheme are consented as part of the 'global' consents as described in Sections 2.2 and 2.3 above. Compared to the rivers in the western half of the region (e.g. in the Hutt Valley and Kapiti Coast), the Ruamāhanga can be characterised as having more in-river management and fewer stopbanks or permanent erosion protection structures. Over time, the existing river schemes will be incorporated into the outcomes of the FMP process.

River schemes are currently funded 50/50 from regional rates and a local contribution. How the local share is apportioned varies across the region. In the Wairarapa, 50% to 100% of the local share is directly rated on the landowners who benefit (depending on the scheme), with the remainder generally being paid by district councils to cover work done by the scheme to protect their infrastructure (e.g. roads).

Each river scheme is governed by an Advisory Committee, largely made of up scheme members but including WRC councilors, that reports to the WRC Environment Committee. They meet yearly with a focus on approving annual work programmes and finances.

3.3 Gravel extraction

Gravel extraction in the Wairarapa is currently used mainly as a tool to manage river alignment. It is carried out by contractors extracting gravel for their own uses, in areas approved by WRC. Gravel extraction from rivers in the whaitua is authorised under consents issued to WRC Flood Protection. WRC issues licenses for extraction to independent contractors with direction to achieve river management outcomes. There are currently around 25 gravel extraction operations in the catchment, of which five operators take around 80% of the totally allocated annual gravel extraction volumes. Total extraction in the catchment is approximately 250 000m^3 per year.

The new resource consent application (WAR150231) incorporates gravel extraction operations in the Upper Valley and dry extraction in the Lower Valley. Once this application is granted, all contractors in the whaitua will be expected to follow WRC's new Code of Practice. It is anticipated that a period of training and adaption will be required.

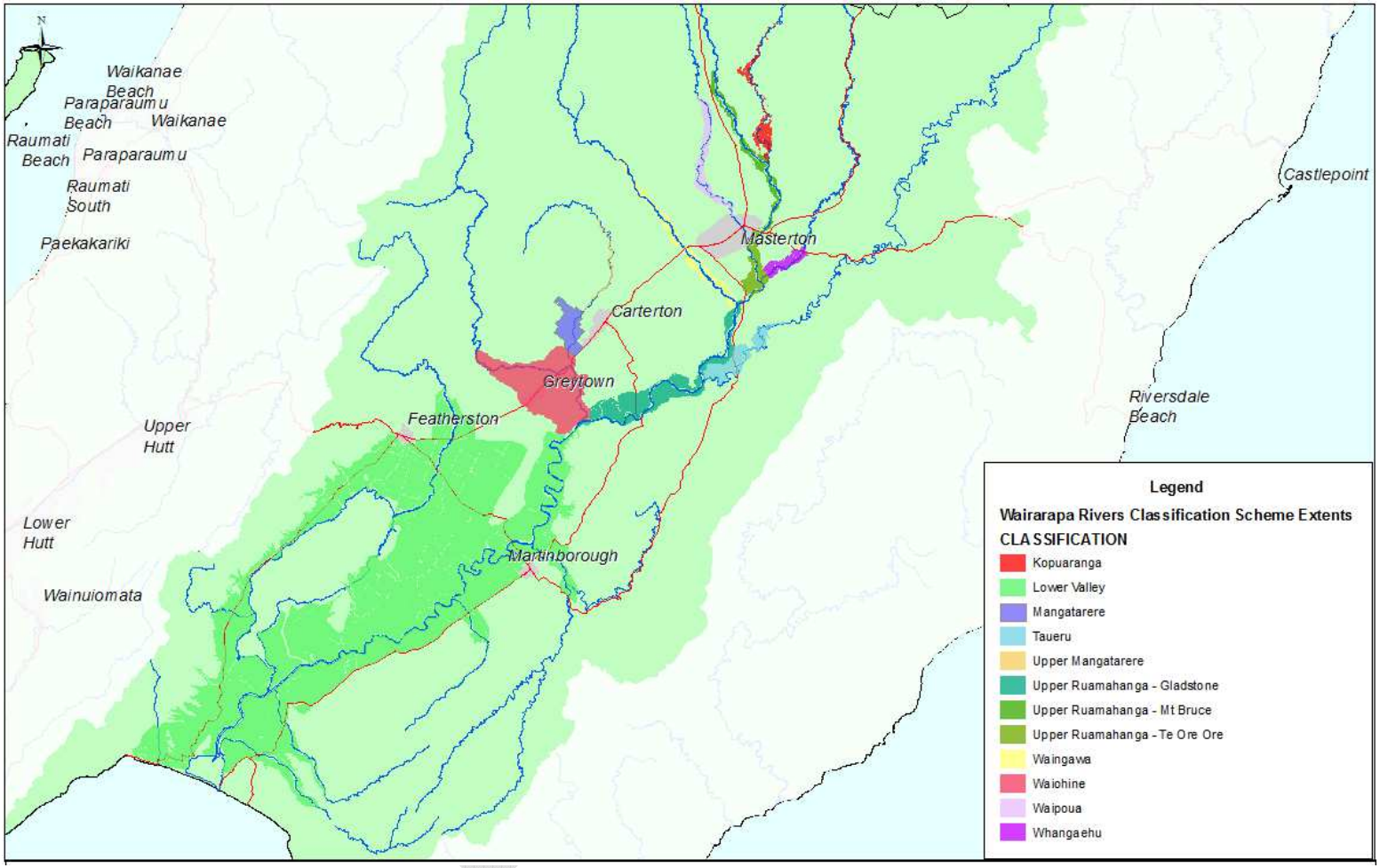

Figure 1. WRC operated river schemes in the Ruamāhanga whaitua

3.4 Draft Environmental Code of Practice and Monitoring Plan

The Environmental Code of Practice and Monitoring Plan (the Code) have been prepared to support the new WRC resource consent process described in Sections 2.2 and 2.3 above. However, it is intended that the Code also guides and monitors all flood and erosion control activities undertaken across the region.

The new global consent applications requires that the monitoring plan be implemented and defines a review process by which the Code will be changed based on information supplied by environmental monitoring. The Code has been designed to remain flexible and responsive to improvements in knowledge and understanding of the effects of WRC work practices on the river environment and to the values of the community.

3.5 Non-regulatory methods in the proposed Plan

The proposed Plan contains several non-regulatory methods relevant to river management. These are:

- Method M14: Maintenance of drains

  Work is underway to develop an education programme to support good management practice in vegetation clearance and bed re-leveling activities in drains and streams. Recognising the change in permitted activity practice with the newly proposed rules for these activities, this programme aims to be underway by late 2016 in order to be ready for seasonal drain clearance works in the spring.

- Method M21: Fish passage

  This method aims to develop guidance and training for land owners and managers in order to support fish passage restoration, including in priority areas.

- Method M11: Assessment and reporting of WRC works, operations and services for integrated catchment management

  This method aims to have WRC departments with operational and service provision roles to look to align assessment and reporting of their activities against the objectives and policies of the proposed Plan around land and water management.

3.6 Other river management drivers

Catchment Schemes

Catchment Schemes are programmes run by the WRC Land Management department focused on erosion control, both on hill slopes and in-river. The existing schemes mainly operate outside of the whaitua boundaries in the Eastern Wairarapa. River management works under these schemes can include stream bank erosion mitigation, willow removal and altering channel alignment to prevent further erosion. Catchment Schemes are funded through rates on benefitting landowners and through funding from local councils where works are undertaken to mitigate erosion impacts on public infrastructure (e.g. roads).

_____	1 June 2016	_____	1 June 2016
Report prepared by		**Report approved by**	
Hayley Vujcich	**Date**	***Alastair Smaill***	**Date**

References

WRC. 2015. Guidelines for floodplain management planning. Wellington Regional Council, publication no. GW/F-G-15/74. http://www.gw.govt.nz/assets/floodprotection/Guidelines-for-Floodplain-Management-Planning.pdf

Appendix

Key provisions of Proposed Natural Resources Plan to river management

Policy P15: Flood protection activities

The use, maintenance and ongoing operation of existing catchment based flood and erosion risk management activities which manage the risk of flooding to people, property, infrastructure and communities are beneficial and generally appropriate.

Policy P16: New flood protection and erosion control

The social, cultural, economic and environmental benefits of new catchment based flood and erosion risk management activities are recognised.

Policy P102: Reclamation or drainage of the beds of lakes and rivers

The reclamation or drainage of the beds of lakes and rivers and natural wetlands shall be avoided except where the reclamation or drainage is:

(a) partial reclamation of a river bank for the purposes of flood prevention or erosion control, or

(b) associated with a qualifying development within a special housing area, or

(c) associated with a growth and/or development framework or strategy approved by a local authority under the Local Government Act 2002, or

(d) necessary to enable the development, operation, maintenance and upgrade of regionally significant infrastructure, or

(e) associated with the creation of a new river bed and does not involve piping of the river, and

(f) in respect of (a) to (e) there are no other practicable alternative methods of providing for the activity, or

(g) the reclamation or drainage is of an ephemeral flow path.

For the purpose of this policy the piping or covering of a stream for a distance greater than that required to form a reasonable crossing point is considered to be reclamation of the river bed.

Policy P103: Management of gravel extraction

The extraction of gravel, sand or rock from the beds of rivers shall be managed so that:

(a) the extraction does not result in an increase in flooding or erosion either at the site of extraction or across the wider river catchment, including any erosion of existing structures, and

(b) the flow of sediment and gravel to the coast is not reduced to the extent it would contribute to coastal erosion, and

(c) the rate of gravel extraction does not exceed the natural rates of gravel deposition, unless this is required to manage aggradation.

Policy P104: Effects on catchment-based flood and erosion control activities

More than minor adverse effects on structures that are part of catchment-based flood and erosion risk management activities shall be avoided, unless those activities are carried out by or on behalf of the owner of the structure.

Policy P105: Protecting trout habitat

Particular regard shall be given to the protection of trout habitat in rivers with important trout habitat identified in Schedule I (trout habitat). The effects of use and development in and around these rivers shall be managed to:

(a) maintain or improve water quality in accordance with the objectives in Table 3.4 and Table 3.5 of Objective O25, and

(b) minimise changes in flow regimes that would otherwise prevent trout from completing their life cycle, and

(c) maintain the amount of pool, run and riffle habitat, and

(d) maintain fish passage for trout, and

(e) minimise adverse effects on the beds of trout spawning waters identified in Schedule I (trout habitat).

Policy P106: Management of plants in the beds of lakes and rivers

The introduction to and removal of plants from the beds of lakes and rivers shall be managed so that:

(a) pest plants are not introduced and their removal is enabled, and

(b) indigenous plant species are encouraged to be planted where they are appropriate and their removal is only enabled where it is necessary to manage flooding and erosion, and

(c) the introduction or removal of plants does not increase flooding and erosion either at the site of introduction or removal, or across the wider river catchment, and

(d) the introduction or removal of plants does not adversely affect significant biodiversity values of the site.