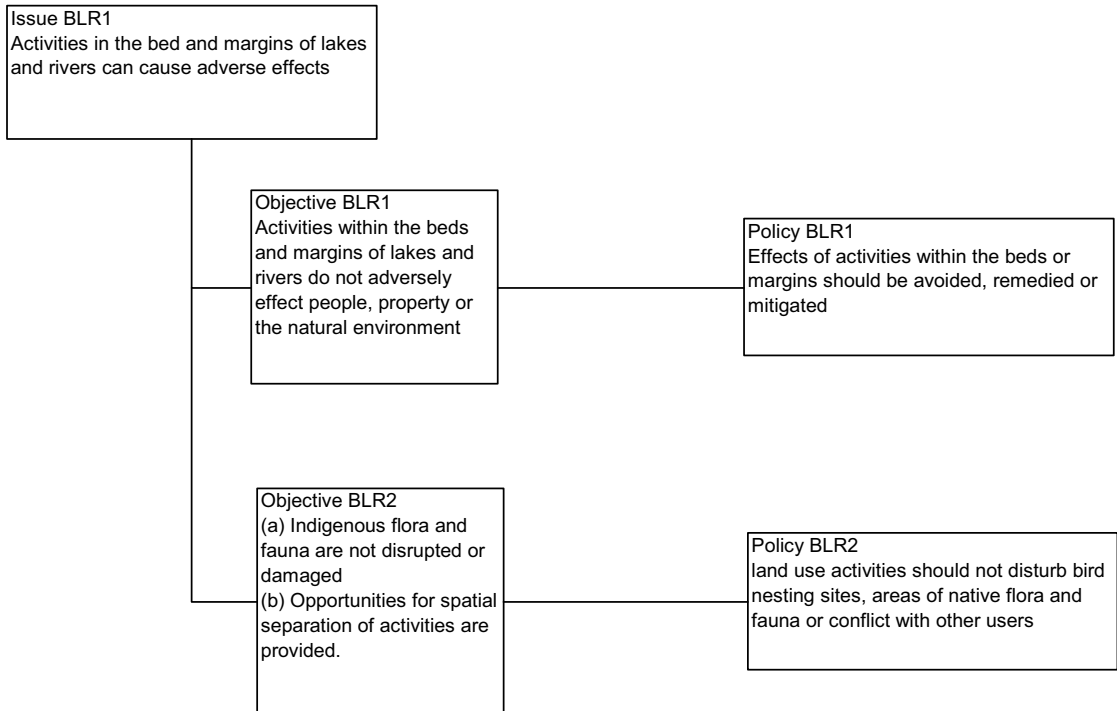


6.5 Issue resolution

Issues within the context of the Proposed NRRP are significant matters of concern within the region. Objectives are then formulated, which, if achieved, should resolve the issues. Policies state what will be done to achieve an objective. The following diagram outlines how these three steps fit together in the context of this chapter. The following diagram is a summary only, the detailed issue resolution process forms the substance of the whole Proposed NRRP.

Figure BLR2: Summary of issue resolution process



Issue BLR1 Activities within the beds and margins of lakes and rivers can cause adverse effects**(1) Activities within the beds and margins of lakes and rivers including:**

- (a) the use, design, location, erection, reconstruction, alteration, extension, demolition and removal of structures;**
- (b) excavating, drilling, tunnelling or other disturbance of the bed;**
- (c) the introduction, planting, clearance or harvesting of plants;**
- (d) the depositing of a substance, including residential, commercial and industrial waste; and**
- (e) reclamation or drainage,**

can adversely affect people, property, outstanding natural features and landscapes, natural character, areas of significant indigenous vegetation and significant habitats of indigenous fauna, Ngāi Tahu cultural values, traditions and sites of significance, amenity values and/or trout and salmon habitat by:

- (i) causing localised scouring or erosion;**
- (ii) modifying water flow leading to flooding;**
- (iii) creating or increasing plant pest infestation; or**
- (iv) initiating, or increasing the rate of coastal erosion.**

(2) Flood control structures can cause excessive gravel build-up within the bed leading to a reduction in the flood-carrying capacity of rivers.**(3) Activities within the beds and margins of lakes and rivers including the use of:**

- (a) motorised vehicles, for example four wheel drives, motorcycles and three or four wheel motorbikes; or**
- (b) machinery, for example gravel excavation or processing equipment,**

can adversely affect outstanding natural features and landscapes, cultural and amenity values, areas of significant indigenous vegetation and significant habitats of indigenous fauna, including nesting birds whether as colonies, e.g. terns and gulls, or as isolated breeding pairs, e.g. wrybill plovers, by:

- (i) physical disturbance of a site or location;**
- (ii) introducing plant pest seeds or material; or**
- (iii) creating noise.**

Objective BLR1 Activities within the beds and margins

Activities in the beds and margins are able to be undertaken while:

- (a) protecting flood carrying capacity to avoid increased risk of flooding of surrounding lands;**
- (b) protecting the stability of lawfully established structures and the banks of lakes and rivers;**
- (c) minimising the spreading or colonising by pest or undesirable plants;**
- (d) preserving natural character;**
- (e) protecting outstanding natural features and landscapes;**
- (f) protecting areas of significant indigenous vegetation and significant habitat of indigenous fauna;**
- (g) promoting the maintenance and enhancement of amenity values;**
- (h) providing for the relationship of Ngāi Tahu and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga;**
- (i) avoiding, remedying or mitigating adverse effects of reductions in sediment transport to the coast where there is a crucial link to rates of coastal erosion; and**
- (j) protecting significant habitat of trout and salmon.**

Explanation and principal reasons

Beds and margins of lakes and rivers are important resources for the community to be able to use, whether for commercial or non-commercial activities. However, it is necessary to establish the framework within which these activities can occur, and in particular, through Objective BLR1, the environmental outcomes to be achieved. In meeting Environment Canterbury's responsibilities under the RMA, Objective BLR1 specifies outcomes for certain values against which the effects of activities can be judged including the importance of managing natural and physical resources sustainably and avoiding or mitigating the effects of natural hazards.

Lakes and rivers are subject periodically to flooding. Where this may affect people, property or certain aspects of the environment, a natural hazard exists. In the situation being considered in this objective, that hazard may be increased in two ways: by increasing the likelihood or severity of flooding, or by increasing the potential damage from flooding.

It is beyond the scope of this objective to consider the potential damage, but from the point of view of increasing the potential for flooding to occur, certain activities may be inappropriate. Such activities include inappropriate location, design, construction, maintenance, alteration, demolition or removal of structures, or the introduction, planting, pruning or removal of vegetation.

In addition to people and property, the RMA also requires effects on other aspects of the environment to be avoided or mitigated. How to give effect to protecting the natural environment is complex. In the face of a natural event there are winners and losers, for example, trees may be uprooted, but the fallen vegetation may provide habitat for fish in a river. In realistic terms, resource management can only attempt to protect other aspects of the environment that have assumed particular importance from a human standpoint, for example, a popular recreation area, or the habitat of a threatened species.

This objective also recognises the link between the rivers, lakes and the coastal marine area (CMA). Inappropriate activities within the beds of rivers may impact on the sediment transportation ability of the fluvial system. In order to avoid aggravating downstream erosion within the region it is important to ensure that inappropriate activities within the beds of lakes and rivers are addressed.

Policy BLR1 Effects of activities within the bed or margins

(1) Control land use activities, including:

- (a) the use, erection, reconstruction, placement, alteration, extension, demolition or removal of structures;**
- (b) excavating, drilling, tunnelling or other disturbance;**
- (c) the introduction, planting, pruning, removal or harvesting of plants;**
- (d) the depositing of any substance, including residential, commercial and industrial waste; and**
- (e) reclamation or drainage,**

within:

- (i) the beds of lakes and rivers;**
- (ii) 7.5 metres of the bed of a lake or river; or**
- (iii) 7.5 metres of any flood control structure,**

to ensure that the achievement of objective BLR1 is not compromised. In particular, activities shall not:

- 1. restrict the passage and/or the dynamics of water flow in a manner that generates or leads to a reduction in flood carrying capacity;**
- 2. cause localised scouring or erosion that adversely impacts on the bed or banks of lakes and rivers, or the stability of lawfully established structures; or**
- 3. create an increase in undesirable or pest plant infestation,**

unless it can be demonstrated through the resource consent process that adequate mitigation measures can be undertaken.

(2) Encourage land holders and users of the beds and margins of lakes and rivers to undertake their activities such that the achievement of Objective BLR1 is not compromised.

Explanation and principal reasons

The beds of lakes and rivers are components of larger dynamic natural systems that due to their form and behaviour are subject to change in response to natural events and the transporting and depositing of sediment.

Activities within the beds of rivers and lakes may not be compatible with each other, with the values associated with the bed or with natural processes. This conflict may result in adverse effects on the environment including reductions in flood carrying capacity (modifications to bed levels and increased risk of flooding of surrounding lands) or erosion. Policy BLR1 is designed to ensure that activities in, on, under or over the beds or margins of lakes and rivers do not adversely affect associated values. This policy addresses the requirements of Part II of the RMA while also ensuring that the provisions of Chapter 6 are not inconsistent with relevant parts of the CRPS.

Excavating material from riverbeds (including large rocks from the surface of the bed) has the potential to impact on flora and fauna, rates of erosion, river channel alignment and structure stability. The significance of this impact will depend on numerous activity and site specific elements.

Excessive build-up of bed materials can reduce flood carrying capacity or direct flow against a bank leading to erosion, increased risk of flooding or damage to infrastructure. Gravel extraction can help reduce the likelihood of this occurring.

Gravel extraction activities can lead to the spread of undesirable plants in and out of the beds and margins. It may be possible to prevent the spread of particular pest plants by not transporting material between different sites or catchments and by cleaning any machinery before transportation to pest free sites on riverbeds.

Careful management of the construction, maintenance, alteration, demolition or removal of structures (which includes *use, erect, reconstruct, place* and *extend* in the context of section 13 (1)(a) of the RMA) is required for the purpose of avoiding or mitigating the effects of natural events (flooding or erosion) on the bed or adjacent land, and the protection of other structures within the bed from scouring and erosion. At the same time, it is important that existing structures are used and maintained in a manner that does not cause or contribute to bed or bank instability or threaten their own integrity or that of other structures. In some cases, this will require the removal of accumulated debris from structures (such as bridges, and pylons), whereas in others, controls on the rate of material extraction may be required to ensure that excess or inappropriate removal does not cause scouring or erosion.

Plant roots help stabilise the banks and berms, and vegetation on the berms reduces stream power. However, the introduction, planting, removal or harvesting of plants needs to be carefully managed to avoid adverse effects such as increased risk of flooding of surrounding land, bank erosion, the introduction of undesirable or pest plant species (see Schedule BLR1) and impacts on Ngāi Tahu values.

The reclamation of the bed or the deposition of substances in or on the bed of a lake or river can affect flood carrying capacity or alter the hydrodynamics of water leading to erosion within the bed, damage to structures and flood control vegetation or the flooding of surrounding land. The significance of such effects will depend on the design, location and scale of the activity as well as other site-specific aspects.

Activities within the bed of rivers can reduce the amount of sediment supplied to the coast. The sea continuously transports sediment northward along the Canterbury coast. If the sea currents are not supplied with sediment from the rivers they will expend their energy removing it from the land, thereby causing coastal erosion.

With regard to the margins of beds of lakes and rivers, predominantly a non-regulatory approach is set out in the methods. However, regulation can be used to control land use activity in close proximity to the bed and flood control structures. Where there is a need for rules controlling land use (outside of those in close proximity to the bed or flood control structures) to help with flood management, this will be pursued with the appropriate district councils, unless for legal reasons, there is a need to include a rule in a regional plan or a district council does not progress the rules required.

Careful management of activities within the flood-prone margins of lakes and rivers will assist in the avoidance or mitigation of the effects of flooding or erosion on adjacent land.

Methods

The methods used or to be used to implement Policy BLR1 are:

Method BLR1(a) Advocacy

- (a) Environment Canterbury will advocate to territorial authorities, developers, landowners and land occupiers for:

- (i) the appropriate location and design of activities within the beds and margins of lakes and rivers, in order to manage erosion of the bed and banks, flooding of surrounding land and the introduction of pest plants; and
- (ii) the maintenance of appropriate vegetation cover for the banks and margins of lakes and rivers to minimise erosion (e.g. deep rooting plants);
- (iii) the maintenance of structures to a standard that reduces the potential for flooding.

Method BLR1(b) Investigations

- (a) Environment Canterbury will:
 - (i) continue to support investigations to improve estimates of the movement of sand and gravel supplied by rivers to the coast;
 - (ii) support investigations to monitor and predict the effects of human activities on river flow and the sediment regime with respect to riverbed morphology, vegetative cover and flooding hazards; and
 - (iii) identify the appropriate location for excavation of bed material to occur.

Method BLR1(c) Information and promotion

- (a) Environment Canterbury will work with territorial authorities, landcare groups, Federated Farmers, industry, landowners, Ngāi Tahu and other parties to:
 - (i) raise the awareness of the vulnerability of particular structures and lake and river banks to scouring and erosion generated by activities within the beds or margins of lakes and rivers;
 - (ii) provide information on significant aquatic and terrestrial habitats, natural character, natural features and amenity values that may be vulnerable to activities within the beds or margins of lakes and rivers; and
 - (iii) provide information, in association with Ngāi Tahu, to users of the plan about wāhi tapu, indigenous flora and fauna and access to mahinga kai that are of significance to Ngāi Tahu and may be vulnerable to activities within the beds or margins of lakes and rivers.
- (b) Environment Canterbury will maintain information on lake and river margins at risk from flooding and will make such information available to any interested parties.

Method BLR1(d) Regional rules

- (a) Environment Canterbury will apply:
 - (i) regional rules BLR1 to BLR6 and BRL8 and BLR9 inclusively within this chapter to control any adverse effects arising from activities within the beds of lakes and rivers; and
 - (ii) regional rules BRL7, BLR8 and BLR9 to control any adverse effects within the margins of lakes and rivers.

Method BLR1(e) Resource consents

Environment Canterbury may grant resource consents for activities within the beds of lakes and rivers that do not meet the conditions of the permitted activity rules. Consents will contain a range of conditions in order to achieve the requirements of Policy BLR1.

Method BLR1(f) Compliance and enforcement

Environment Canterbury will maintain a programme of compliance monitoring of permitted activities and resource consents. Environment Canterbury may apply enforcement orders, issue abatement notices, issue infringement notices and use other enforcement mechanisms, identified within Part XII of the RMA, where activities within the beds of lakes and rivers are undertaken in a manner inconsistent with the rules or conditions of consents.

Method BLR1(g) Response to complaints and enquiries

- (a) Environment Canterbury will:
- (i) provide a 24 hour system to respond to any complaints about activities within the beds of lakes and rivers;
 - (ii) maintain a database to record the details of any complaints or incidents and the response by Environment Canterbury; and
 - (iii) provide a customer services line during office hours to respond to any enquiries about activities within the beds of lakes and rivers.

Method BLR1(h) Floodplain strategies

Environment Canterbury will advocate to, and work with, territorial authorities, the community and other stakeholders for the development of flood plain management strategies. These strategies may identify and/or comment on such aspects as gravel accumulation within the bed, or the appropriateness of subdivision or land development within the bed or margins of lakes or rivers that are identified as at risk of significant flooding. Appropriate management may include the removal of gravel or the location of river control or design requirements for buildings, zoning of at risk areas such as public reserves, consents and/or controlling development.

Any floodplain strategy will have particular regard to service provision and financial incentives and assistance as follows:

- (a) service provision may be used to recover the costs of natural hazard management, including the erection of stopbanks, excavation of bed material, planting of trees, drain maintenance, river control works and flood warning approximately in proportion to the benefit people obtain from it. In order to achieve this, Environment Canterbury may apply user charges or charge a differential rate;
- (b) financial incentives and assistance may be used to subsidise the cost of excavating materials from locations where bed aggradation may increase the risk of flooding of surrounding land or impacts on structures, and commercial excavation is unable to extract sufficient quantities; and
- (c) where strategies identify the need for land use controls, the preferred option will be for these to be included in district plans unless there are legal reasons for including them in a regional plan, or the district council does not progress the rules required.

Objective BLR2 Land use activities within the bed or margins

- (1) The breeding success of indigenous riverbed breeding birds, the habitat of other significant indigenous fauna, areas of significant indigenous vegetation and Ngāi Tahu sites of significance should not be disrupted or damaged by human activities in the beds of lakes and rivers.**
- (2) Opportunities are provided for spatial separation of incompatible activities in the beds and margins of lakes and rivers.**

Explanation and principal reasons

The location of activities, such as the use of recreational vehicles (including four wheel drives, motorcycles, three or four wheel motorbikes) or machinery in the bed may disrupt the breeding success of riverbed breeding birds or damage sites of significant indigenous flora. Some indigenous bird species that breed on Canterbury's braided river systems are regarded as threatened or endangered. Vehicles close to nesting can cause birds to leave for sufficiently long periods that breeding fails.

Some activities, particularly those that are noisy, can create conflict with other activities, lowering amenity values and in some cases, creating safety issues for other users.

Policy BLR2 Land use activities within the bed and margins

Within the beds and margins of lakes and rivers:

- (1) Avoid to the extent practicable recreational and commercial activities where those activities:**
 - (a) result in the disturbance of indigenous birds nesting in the beds;**
 - (b) damage or disrupt areas of significant indigenous vegetation, the habitat of indigenous fauna or Ngāi Tahu sites of significance; or**
 - (c) conflict with other activities.**
- (2) where there are conflicts between activities or with other riverbed values, encourage the identification of alternative areas where those activities can occur.**

Explanation and principal reasons

The use of beds and margins of lakes and rivers can range from the passive enjoyment of their amenity and landscape values through to more intrusive activities such as use of trail bikes, four wheel drive vehicles or commercial operations. These activities have the potential to conflict with each other and with other aspects of the environment such as the nesting of indigenous birds or sites of significant indigenous vegetation. The appropriate management of the beds of lakes and rivers involves taking steps to ensure such conflicts are addressed.

It is beyond the function of Environment Canterbury to regulate land use within the beds and margins of lakes and rivers to solely avoid conflict between users or protect indigenous bird nesting sites. These are functions of a territorial authority; therefore, the methods used to implement policy BLR2 are non-regulatory.

Methods

The methods used or to be used to implement Policy BLR2 are:

Method BLR2(a) Advocacy

Environment Canterbury will advocate to territorial authorities, landowners and recreational and commercial users of the bed and margins to identify:

the appropriate location and timing of activities in, on, over and under the beds and margins of lakes and rivers, in order to avoid impacts on areas of indigenous bird nesting sites that have a high level of vulnerability from activities in the beds and margins of lakes or rivers.

Method BLR2(b) Information and promotion

Environment Canterbury will work with territorial authorities, landowners, recreational and commercial users of the bed and margins, environmental groups, Ngāi Tahu and other parties to:

- (a) promote the protection of areas of indigenous bird nesting sites that are vulnerable to damage from activities in the beds and margins of lakes and rivers;
- (b) provide information on significant aquatic and terrestrial habitats, amenity values and Ngāi Tahu sites of significance that are vulnerable to activities within the beds and margins of lakes and rivers; and
- (c) provide information on areas where activities can be undertaken without affecting indigenous flora and fauna or conflicting with other users or values of the beds and margins of lakes and rivers.

Method BLR2(c) Investigations

Environment Canterbury will support investigations to identify areas where activities can be undertaken so as to avoid conflicts with each other, or with significant aquatic and terrestrial habitats, or Ngāi Tahu sites or significance that may be vulnerable to activities within the beds and margins of lakes and rivers.

Method BLR2(d) Reserve Ranger on Environment Canterbury administered land

Environment Canterbury will employ one or more rangers to patrol riverbeds and margins administered by Environment Canterbury, where there is significant potential for recreational and other activities to conflict with each other or with the values in those areas.

Figure BLR3: Generalised relationship between rules and resource consents.

