

Section 32 Report

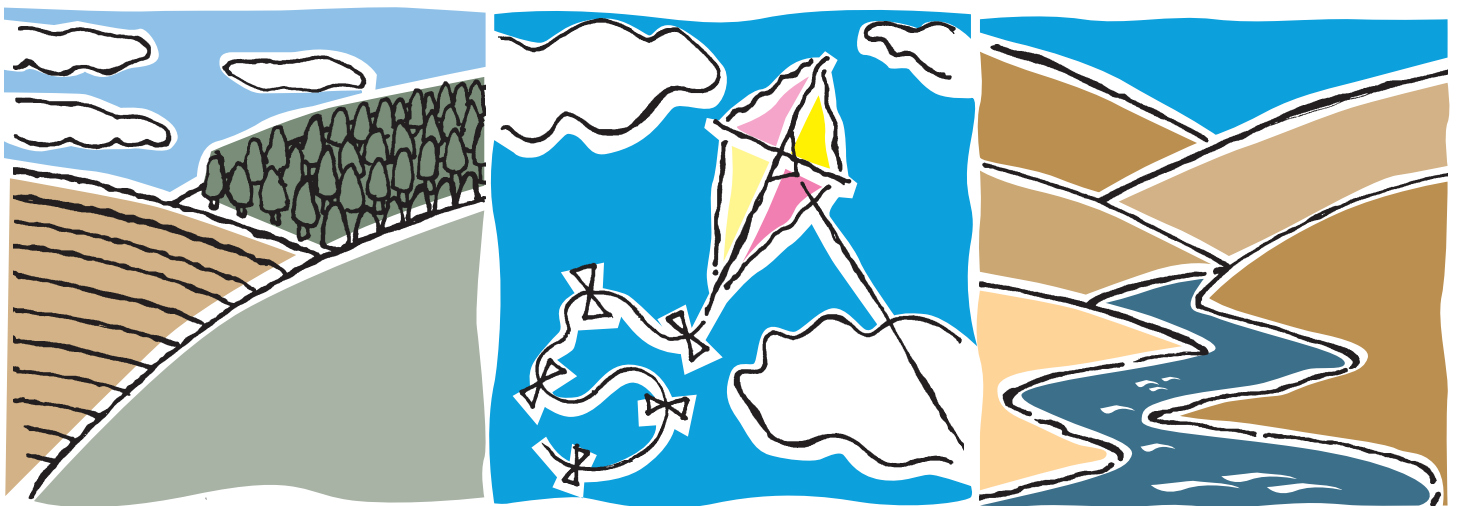
Variation 1

Proposed Natural Resources Regional Plan

For Chapter 6:

**Beds and margins of
lakes and rivers**

Prepared under the Resource
Management Act 1991
July 2004



**Environment
Canterbury**
Your regional council



This is a true and correct copy of the Section 32 Report for Chapter 6 Beds and margins of lakes and rivers, part of Variation 1 to the Proposed Canterbury Natural Resources Regional Plan prepared by the Canterbury Regional Council.

This report meets the Canterbury Regional Council's obligations under section 32 of the Resource Management Act 1991 to carry out an evaluation and prepare a report summarising the evaluation and giving reasons for that evaluation.

This report was adopted at a meeting of the Canterbury Regional Council on 27 May 2004.

The Common Seal of the Canterbury Regional Council was affixed in the presence of:

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1.1 Introduction

1.1.1 The Proposed Canterbury Natural Resources Regional Plan

The Proposed Canterbury Natural Resources Regional Plan (NRRP) comprises eight chapters as follows:

Chapter 1 Introduction

Chapter 2 Ngāi Tahu and the management of resources

Chapter 3 Air quality

Chapter 4 Water quality

Chapter 5 Water quantity

Chapter 6 Beds and margins of lakes and rivers

Chapter 7 Wetlands

Chapter 8 Soil conservation

Chapters 1-3 reached the “proposed” stage in June 2002 and will be at the Council hearing stage about June 2004.

Chapters 4-8 have been incorporated into the Proposed NRRP by way of a variation and as such a Section 32 report is required to be made available for public inspection at the same time as Chapters 4-8 are publicly notified. A challenge to an objective, policy, rule or other method on the grounds that Section 32 has not been complied with, may only be made in a submission in terms of the First Schedule of the Resource Management Act.

This report meets Environment Canterbury’s obligations under Section 32(5) to prepare a report summarising the evaluation of objectives, policies, rules and other methods as required by Section 32 of the Resource Management Act.

Each of chapters 4-8 has its own Section 32 report.

1.1.2 What the Section 32 evaluation requires

Before a proposed regional plan, variation or change is publicly notified by a local authority, the authority must carry out an evaluation in terms of Section 32 of the Resource Management Act.

Sections 32(3) and 32(4) state:

(3) *An evaluation must examine—*

(a) *the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and*

(b) *whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.*

(4) *For the purposes of this examination, an evaluation must take into account—*

(a) *the benefits and costs of policies, rules, or other methods; and*

(b) *the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.*

In addition to this mandatory evaluation, it is also useful to include a brief summary of the process by which the regional plan has been prepared, including the consultation process, and legal opinions that have helped determine the content of certain provisions.

The Section 32 process is essentially formalising what constitutes good planning practice.

1.1.3 Approach followed in undertaking the evaluations

The following sets out the general structure of this Section 32 report:

1.1.3.1 Resource management issue being addressed

While not required to be included in the section 32 report, it will be helpful to users of this report to understand the basis and origin of the issue as this provides a context for the evaluations of the objectives and policies that follow.

1.1.3.2 Evaluation of the objective(s) – the environmental outcome to be achieved

The Resource Management Act Amendment 2003 removed the need to evaluate alternative objectives and to carry out a cost benefit analysis. Section 32 now requires an evaluation of the extent to which the objective is the most appropriate to achieve the purpose of the Act. Appropriateness is not defined in the Act. In undertaking the evaluation it has generally been helpful to consider alternative forms of the objective and test them in terms of how well they met the environmental, social/cultural, and economic outcomes in Section 5, plus achieving other Part 2 matters. Often these assessments require value judgements because they are not readily quantified. Usually the objective is also tested against how well it addresses the elements of the issue.

1.1.3.3 Evaluation of policies – what the council is going to do to achieve the objective

The evaluation of appropriateness assesses the alternative policy options under the headings of effectiveness, efficiency, benefits, costs, and uncertainty. A range of criteria/matters have been used to assist in undertaking the evaluations:

- (a) efficiency - the ratio of inputs to outputs. Efficiency is high where a small effort/cost is likely to produce a proportionately larger return. Includes the ease of administration/administrative costs e.g. if the cost of processing a grant or collecting a fee exceeds the value of the grant or fee, that is not very efficient;
- (b) effectiveness - how well it achieves the objective or implements the policy relative to other alternatives. The likelihood of uptake of a method;
- (c) benefits - social, economic, environmental - as both monetary and non monetary cost/benefits;
- (d) costs - social, economic, environmental - as both monetary and non monetary cost/benefits; and
- (e) uncertainty - the risk to the environment of not taking action in say the next 10 years because of imperfect information e.g. the cause/effect relationships are not fully understood.

The analysis concludes with an overall assessment of appropriateness of the policy options for achieving the objectives.

1.1.4 Evaluation of methods, including rules – how the council is going to implement the policy

As for policies, the evaluation of appropriateness of the methods uses the same headings of effectiveness, efficiency, benefits, costs, and uncertainty. Each method is an alternative to any other method. The analysis concludes with an over all assessment of appropriateness of the alternative methods for implementing the policies and achieving the objectives. Chapter 6 includes those methods that have the highest ratings across the criteria.

Record of the development process of Chapter 6

1.1.5 Meetings with stakeholders

Date	Content
30 January 2003	Rūnanga Hui
3 February 2003	Public meeting Timaru – release of draft chapter
4 February 2003	Public meeting Christchurch – release of draft chapter
12 February 2003	Transit NZ and Opus International
18 February 2003	Land Information NZ
21 February 2003	Hurunui District Council (staff and councillors)
24 February 2003	Federated Farmers (Waitaki branch)
25 February 2003	Issac Construction

1.1.6 Legal opinions

Date	Content
6 January 1998	The purpose and scope of regional council plans.
19 October 2001	Links between RMA and Building Act (dam construction issues)
19 October 2001	Territorial Local Authority and Regional Council Jurisdiction (in relation to land use controls within the bed)
15 March 2002	The extent of ECan's responsibility under sections 13, 30 and part II of the Act. Shape of draft provisions in Proposed NRRP Chapter 8.
September 2003	Defendability of proposed rules.

1.1.7 Technical reports

Many of the reports listed within this section have not been specifically prepared to help the development of Chapter 6, but instead have been used to form some part of the basis for its provisions.

Date	Report title	Report Number
Over the course of Proposed NRRP development	The Department of Conservation Arthur's Pass and Aoraki/Mount Cook national park management plans, and the Canterbury, Otago and Nelson-Marlborough conservation management strategies.	N/A
Over the course of Proposed NRRP development	The plans or strategies of Ngāi Tahu, Fish and Game New Zealand regions, the regional plans of the adjoining Tasman and Marlborough unitary authorities, and the Otago Regional Council.	N/A
October 1997	Report Title - Opihi and Opuha rivers repair standards of river control works undertaken as a consequence of failure of the Opuha dam.	U97/66
January 1998	Report Title - The impact of vegetation clearance in riverbeds on bird populations.	U98/13
January 1998	Report Title - Operational plan: implementation of the regional pest management strategy 1998.	R98/19

February 1998	Report Title - Sediment budgets for the Canterbury coast: a review, with particular reference to the importance of river sediment.	U98/12
April 1998	Report Title - Regional pest management strategy 1998.	R98/6
April 1998	Report Title - Flood history study Ashburton River.	U98/73
June 1998	Report Title - Opuha dam collapse: a review.	R98/12
January 1999	Report Title - Kaikoura Floodplain: issues and options.	R99/1
January 1999	Report Title - Investigations of bed level and gravel volume changes in seven Canterbury Rivers.	U99/24
June 1999	Report Title - Natural character and amenity values of rivers and lakes.	U99/47
August 1999	Report Title - Water our future: Issues and options: a discussion document contributing to the preparation of the Natural Resources Regional Plan for Canterbury: part C: Water.	R99/14
October 1999	Report Title - Ashburton River floodplain management strategy: assessment of impact on proposed stopbanks on flooding downstream of Ashburton.	U99/73
January 2000	Report Title - Sedimentation processes in the North branch of the Ashburton River, and mitigation options to reduce the flood hazard to the Ashburton area, Mid Canterbury.	U00/44
June 2000	Report Title - Survey of salmonid distribution and habitats in the Canterbury region.	U00/31
June 2000	Report Title - The significance of river and open water habitats for indigenous birds in Canterbury, New Zealand.	U00/37
October 2000	Report Title - Environment Canterbury waterways assessment project: natural character, landscape features and amenity values.	U00/69
March 2001	Report Title - Canterbury rivers: assessment of the natural character, landscape quality and amenity values.	U01/35
May 2001	Report Title - Significant indigenous aquatic, littoral and riparian vegetation of Canterbury water bodies and factors that affect its composition and condition.	U01/45
June 2001	Report Title - Proposed Canterbury Natural Resources Regional Plan	R01/4
June 2001	Report Title - Natural character, landscape and amenity values of the Ashburton / Hakatere River, lakes and tributaries.	U01/44
November 2001	Report Title - Assessment of the potential effects of dams on selected South Canterbury rivers on sediment movement and coastal nourishment.	U01/94
November 2001	Report Title - Review of options to manage risks posed by dams: appendices.	U01/112/ 2
January 2002	Report Title - Review of options to manage risks posed by dams.	U01/112/ 1
February 2002	Report Title - Proposed Canterbury Natural Resources Regional Plan: Chapter 8 Beds and margins of lakes and rivers.	R02/3/8
August 2002	Report Title - Canterbury rivers and lakes: inventory of instream values: a desktop review.	U02/45
December 2002	Report Title - Discussion draft: Canterbury Natural Resources Regional	R01/27/8

	Plan : Chapter 8 : Beds and margins of lakes and rivers.	
January 2003	Report Title - Lake classification and assessment of lake riparian zones for Canterbury lakes.	U03/42
September 2003	Report Title - Operative Waimakariri River Regional Plan.	R03/24
September 2003	Report Title - Review of streamside buffer distances in discussion draft Proposed Canterbury Natural Resources Regional Plan (NRRP) water quality chapter 7, between land applications of contaminants and surface water.	R03/28

1.1.8 Workshops, regional planning committees and council meetings

Date	Report title
3 December 2001	Policy Briefing Paper on the development to date of Chapter 8 Beds and margins of lakes and rivers. Paper No 01-01.
15 April 2002	Policy Briefing Paper on the development of Chapter 8 Beds and margins of lakes and rivers. Paper No 01-02.
14 November 2002	Presentation of Discussion Draft Chapter 8 to Regional Planning Committee Report No RO1/27/8 ISBN 1-86937-427-4.
28 November 2002	Council meeting – release of Chapter 8 Beds and Margins of Lakes and Rivers Discussion Draft for public submission.
16 July 2003	Regional Planning Committee – presentation of amended objectives and policies.
06 August 2003	Regional Planning Committee – presentation of amended rules.
13 November 2003	Regional Planning Committee Workshop – presentation of section 32 report.
25 November 2003	Regional Planning Committee – Proposed NRRP Chapter 8 Beds and margins of lakes and rivers Section 32 approval in principle.
25 November 2003	Regional Planning Committee – Chapter 6 Beds and margins of lakes and rivers approval in principle.
20 May 2004	Regional Planning Committee – Recommended the adoption of Proposed NRRP Chapter 6 Beds and margins of lakes and rivers and Section 32 report to Council
27 May 2004	Council meeting – Proposed NRRP Chapter 6 Beds and margins of lakes and rivers and Section 32 report approved for notification.

1.2 Legal framework and background information

1.2.1 RMA Section 13 River and lake beds

Section 13(1) of the RMA restricts the range of activities that can be undertaken within the bed of a river or stream unless they are expressly allowed by a rule in a regional plan, any relevant proposed regional plan or a resource consent. However, in accordance with section 5 of the RMA people and communities should also be 'enabled' to provide for their social, economic and cultural wellbeing while ensuring that the natural environment is adequately protected.

Environment Canterbury must attempt to achieve an integrated approach to the management of the beds of lakes and rivers that enables people and communities to use them, but also avoids, remedies or mitigates any adverse effects on the environment. Because section 13 (1) restricts a range of activities in river and lake beds, including some that need not require resource consent, in promoting sustainable management, one issue Chapter 8 of the Proposed NRRP must resolve is how far to go with lifting the restrictions in section 13 (1).

In contrast, section 9 is permissive with respect to the use of land and activities that can be undertaken as of right, unless a rule in a plan states otherwise. If a regional plan does not regulate land use, then the activity is allowed under the RMA (subject to provisions within a district plan). Regional plan land use regulations for activities in a river or lake bed, are restricted to those matters covered by its section 30(1)(c) functions, i.e. soil conservation, water quality, water quantity, natural hazards, hazardous substances and the planting of plants.

There are no restrictions in relation to non-regulatory methods and a regional plan can include any method that would help achieve integrated management.

1.2.2 Defining the Bed

The Canterbury region contains a diverse variety of river and lake forms. Many of the lowland spring-fed streams have clearly identifiable banks (e.g. Avon River, Harts Creek, Ohapi Creek), however, in contrast a number of the beds of braided mountain-fed rivers are very wide, often do not have clearly defined banks, particularly in the lower reaches and may be up to five kilometres wide in places (e.g. the Rakaia River). Many of these have numerous historic 'banks' that are recognised as old river terraces and have been incorporated into the surrounding land uses. This diversity makes the defining of a river or lakebed difficult. Although the RMA already supplies a definition for the beds of lakes and rivers, it was seen, especially in the case of rivers, as beneficial in the section 32 analysis for the chapter to discuss any alternative options for defining what constitutes the bed.

Option 1: Redefine the extent of the bed through the use of geographical or vegetative forms. This approach would rely on redefining the bed by its 'depression' in the ground or by the stability of the plants bordering it. While this works well for beds with few terraces, it does not work for beds with many (often historical) banks or terraces with active fairways. Larger braided beds can have a large area of geographical depression that would not always be considered to be the bed. The use of changes in vegetation type to define the bed does not take account of the fact that flooding can not only be infrequent but can also be geographically irregular in the areas of the bed that are affected. Large flood events may/or may not flood/erode parts of the bed whether they contain previously 'stable' vegetation or not.

Option 2: Redefine bed to state that fullest flow is the flow during a 100 year return cycle flood event. This option would work well where flood mapping has taken place, however, where mapping has not taken place this would offer no more certainty than the RMA definition and would add further uncertainty to plan users.

Option 3: Leave the definition as it is in the RMA for the objectives and policies – but for the purpose of rules give more certainty by using annual fullest flow. However, this approach is

considered to be too narrow, as the risk faced by flood events greater than the annual average is considered too high to be excluded from the definition.

Option 4: Redefine the bed by adding text to the definition, such as '[...] that area of a river that has a formed and recognisable bed [...]'. However, this does not aid in the defining of the bed and tends to focus on the fairway only. The court has also warned councils against redefining definitions that are already clear (*Southern Scallop Fishing Quota holders V Tasman DC*) and has also indicated that councils should be wary of using definitions that are imprecise or ambiguous (*Titterton V Dunedin City Council*). Therefore, any redefining of the definition contained within the RMA would need to be satisfied that they were 'adding value or 'improving' the definition through change.

Option 5: Use the definition in the RMA. The discussion above highlights that redefining the definition of bed, as contained within the RMA is unlikely to provide any increased level of certainty. Using the definition contained within the RMA would be supported by case law, the use of the same definition in a number of Territorial Authority plans within the region and regional council plans throughout the country, the definition in the RPS and numerous other Environment Canterbury planning documents (Land and Vegetation Plan Part III, Waimakariri River Regional Plan, the Opihi River Regional Plan and the Proposed NRRP: Water Discussion Document. Under this approach, where it becomes an issue, the boundary would need to be established on the ground, on a case-by-case basis.

The preferred approach is to adopt option 5 and use the definition in the RMA.

1.2.3 **Planting and Clearance of Vegetation**

Chapter 6 addresses the following matters relating to planting and clearance of vegetation within the beds of lakes and rivers:

- (a) provision for planting and clearance activities, where appropriate; and
- (b) managing the effects of such activities.

Section 13(1) of the RMA restricts the introduction or planting of any plant or part of any plant in, on, or under the bed of any lake or river unless such activities are expressly allowed by a rule in a regional plan, any relevant proposed regional plan, or a resource consent.

Not all activities associated with the planting and clearance of vegetation are going to have significant adverse effects on the environment. In many instances, the planting of vegetation within the beds and margins of lakes and rivers can be beneficial for flood protection, bank stability, amenity enhancement, restoration of natural character, and the enhancing of habitats of various indigenous flora and fauna. However, planting can also result in a number of adverse effects. For example:

- (i) creating or increasing undesirable plant infestation problems through the planting of inappropriate species or varieties;
- (ii) restricting the passage of water and leading to increased risk of flood waters on surrounding lands;
- (iii) adversely modifying local aquatic and terrestrial habitats, natural character, natural features and amenity values associated with the water body;
- (iv) limiting access to and along lakes and rivers; and
- (v) impacting on the relationship of Ngāi Tahu and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, mahinga kai and other taonga.

The location and manner in which clearance of vegetation from the beds and margins of lakes and rivers occurs can result in:

1. increased risk of flooding of surrounding land, for example as a result of debris blocking channels or the laying of harvest debris in rows that channel floodwaters inland;

2. the modification of water flow resulting in localised scouring, erosion and adverse impacts on the integrity of nearby structures and the banks of lakes and rivers as a result of trampling or pugging by grazing stock or the clearance of vegetation that benefits flood control;
3. modification to local aquatic and terrestrial habitats, natural character, natural features and amenity values associated with the water body; and
4. adverse effects on the relationship of Ngāi Tahu and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, mahinga kai and other taonga;

1.2.4 Structures in the Beds and Margins

Chapter 6 addresses the following matters relating to structures within the beds and margins of lakes and rivers:

- (a) provision for the ongoing use or maintenance of lawfully established structures;
- (b) protection of lawfully established structures from other activities in the bed; and
- (c) managing the effects of the use, erection, reconstruction, placement, alteration, extension, removal, or demolition of any structure or part of any structure in, on, or under the bed of any lake or river.

Section 13(1) of the RMA restricts the use, erection, reconstruction, placement, alteration, extension, removal, or demolition of any structure or part of any structure in, on, or under the bed of any lake or river unless such activities are expressly allowed by a rule in a regional plan, any relevant proposed regional plan or a resource consent. Accordingly, to avoid unnecessary resource consent applications it is necessary to identify the nature of activities that can be permitted.

Many structures in the beds and margins of rivers and lakes are important physical resources providing:

- (i) essential transport and communication links between communities;
- (ii) generation and reticulation of electricity; or
- (iii) protection against the effects of flooding.

A large number have also been constructed for private use to support commercial operations or recreational activities. Not all structures are permanent. Some may be installed and used for short periods to support activities such as logging, extraction of bed materials, or construction works.

New or altered structures that result in changes to bed levels or the direction and hydrodynamics of water flows can have major implications for the stability and operation of existing structures. Further, inappropriately designed or located structures within the beds and margins of lakes and rivers can:

1. result in increased risk of flooding of surrounding lands, localised scouring and erosion, adverse impacts on the integrity of existing lawfully established structures and the banks of rivers as a result of the inappropriate location of activities, structure design or mitigation measures;
2. modify the habitats of significant indigenous flora and fauna, natural character, outstanding natural features and amenity values associated with the water body as a result of the inappropriate location of activities, structure design or mitigation measures; and
3. compromise the relationship Ngāi Tahu as kaitiaki have with their identified taonga such as wāhi tapu, indigenous flora and fauna and access to mahinga kai as a result of the inappropriate location of activities, structure design or mitigation measures.

Also of particular note are flood control structures. Considerable community effort and investment has been expended over many years to develop a network of flood control

structures, e.g. stopbanks, to protect human safety, property, or other aspects of the environment. Activities within the bed and margins of lakes and rivers that potentially put these structures at risk need to be managed accordingly.

1.2.5 Disturbance of the bed

Section 13(1) of the RMA restricts the excavation, drilling, tunnelling, depositing of substances in, on, or under the bed or otherwise disturbing the bed of a lake or river unless such activities are expressly allowed by a rule in a regional plan, any relevant proposed regional plan or by a resource consent. Accordingly, to avoid unnecessary resource consent applications it is necessary to identify the nature of disturbances that can be permitted.

Disturbance of the bed needs to be managed appropriately in order to avoid or mitigate any potential adverse effects, including:

- (a) modification of the passage and hydrodynamics of water flow resulting in flooding of surrounding lands, localised scouring and erosion, adverse impacts on the banks of lakes and rivers and the integrity of lawfully established structures as a result of the extent, location, duration or design of activities;
- (b) modification of habitats of significant indigenous flora and fauna, natural character, outstanding natural features and amenity values associated with the water body as a result of activity timing, location or inappropriate remediation or mitigation measures;
- (c) compromising the relationship Ngāi Tahu as kaitiaki have with their identified taonga such as wāhi tapu, indigenous flora and fauna and access to mahinga kai as a result of activity timing, location or inappropriate remediation or mitigation measures; and
- (d) contributing contaminants to water (see Chapter 4 of the Proposed NRRP, Water Quality).

Generally, the braided beds of rivers within the Canterbury region contain a surplus of gravel. Due to stopbanking, these rivers can no longer spread their gravel over the floodplain, which results in aggradation of the bed and a reduction in flood carrying capacity of the river. In order to maintain the free flow of water it is necessary in some instances to disturb the bed in order to actively remove the built-up material.

Recreational use of the 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 and four wheel drive vehicles. 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. Because regional plans can only contain rules that relate to section 30 functions, a regional council cannot regulate activities such as the use of vehicles on the bed, if the only effect is on dry land or nesting birds (these are functions of a territorial authority under section 31(b)). However, under section 30(1)(a) a regional plan can contain non-regulatory methods relating to any matter that would help achieve integrated management. [E2]

1.2.6 Coastal erosion

Coastal currents and wave action continuously transport sediment along Canterbury beaches, mostly in a northward direction. If these coastal processes are not supplied with gravel to transport sediment will be removed from the land instead. Thus, activities in beds of rivers that reduce the supply of sediment to the coast, particularly dams, could lead to accelerated coastal erosion[E3].

Photographic, survey and topographical evidence reliably indicate that approximately 70 to 75 percent of the Canterbury region's coast is in a long-term state of net erosion. While the rate of net erosion is site specific and varies throughout the region, the potential effects include the following:

- (a) loss of productive land;
- (b) threats to key infrastructure (e.g. State highway one) and buildings;

- (c) impacts on the surrounding environment (e.g. modifying or destroying wetlands); and,
- (d) restrictions on human interaction with the coast (e.g. limiting opportunities for recreation, food gathering and spiritual needs).

From the perspective of minimising damage to people, property, or the environment, Environment Canterbury has a responsibility to ensure ongoing monitoring is undertaken of coastal erosion rates and the activities that may influence these. There is also a need to appropriately manage activities that are known to initiate or increase the rate of coastal erosion, to avoid such effects[E4].

1.2.7 Public access

The RMA identifies as matters of national significance the maintenance and enhancement of public access to and along lakes and river and the relationship of Māori and their culture and tradition with their ancestral lands, water, sites, wāhi tapu and other taonga. The RMA requires that these matters be recognised and provided for by regional councils when carrying out their duties and functions under the RMA. Controlling activities for the purpose of provision of access is not a function of regional councils under the RMA. However, the Canterbury Regional Policy Statement reinforces the provision of public access to and along the beds of lakes and rivers as a matter of regional significance, as identified in the RMA.

District councils, through mechanisms such as esplanade strips, esplanade reserves, access strips and management of district roads, can influence access availability to the beds of lakes and rivers. This approach is recognised within the CRPS which encourages the district council process to consider “*provisions to maintain and enhance public access to and along the beds and margins of rivers and lakes for the enjoyment of their recreational and amenity values, and for tāngata whenua to exercise kaitiakitanga*”. The CRPS suggests provisions include establishing esplanade reserves/strips, access strips or acquisition of reserves, and negotiating agreements or covenants with landowners or occupiers.

Recreational use of the beds 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 recreational vehicles. The beds and margins of lakes and rivers are also identified as important for Ngāi Tahu to gain access to mahinga kai and for the cultural and spiritual values that are offered by these areas. The appropriateness of public access will depend on site-specific components including, public demand for access, ecological and/or cultural sensitivities within the area, issues of public health and safety, funding availability and the maintenance and functional integrity of flood control structures and vegetation.

Both the RMA and the CRPS require that the Regional Council provide for the maintenance and enhancement of public access¹ to and along rivers and lakes and to manage the potential adverse effects of such access. These provisions are considered sufficient in themselves to address the issue of public access and therefore Chapter 8 of the Proposed NRRP does not contain provisions directly related to public access.

1.3 Do activities in the beds and margins of lakes and rivers create a resource management issue that needs to be addressed in a regional plan?

1.3.1 Aspects covered by the Canterbury Regional Policy Statement

Chapter 10 of the Canterbury Regional Policy Statement (CRPS) sets out the beds and margins of lakes and rivers issues for the Canterbury region. The CRPS has been through all the necessary statutory steps and is operative. Under section 84 of the RMA, Environment Canterbury is obliged to observe it and enforce its observance. The CRPS includes the following issues in Chapter 10 relating to the beds and margins of lakes and rivers:

Issue 1

With respect to land use activities within water bodies, their beds and margins:

- (a) *Damage to the natural character of lakes and rivers, habitats of indigenous flora and fauna and trout and salmon, the health of aquatic ecosystems, the quality or extent of and access to mahinga kai, wāhi tapu and wāhi taonga, or heritage sites due to:*
- (i) *the effects of drainage works on wetland margins;*
 - (ii) *land uses which modify riparian vegetation;*
 - (iii) *degraded water quality from contaminant discharges;*
 - (iv) *damming or diversion of flows, and direct destruction by construction or mining machinery;*
 - (v) *the effects of management of the levels of lakes and coastal lagoons;*
 - (vi) *siltation of the beds of water bodies through human induced erosion;*
 - (vii) *disturbance of wildlife and destruction of habitats by vehicles, watercraft, people and domestic animals, particularly grazing stock;*
 - (viii) *the replacement of diverse ecosystems with a narrow range of plant species in riparian plantings;*
 - (ix) *effects of the spread and control of undesirable plants in water bodies, their beds and margins;*
 - (x) *effects of the dumping of rubbish.*
- (b) *Reduction of significant amenity values, cultural and recreation values, or natural features and landscapes including:*
- (i) *the effects of dust storms associated with low lake levels (e.g. Lake Tekapo);*
 - (ii) *the effects of the extraction of rock, gravel, sand or other bed material, and river works activity;*
 - (iii) *the presence of structures, buildings, and other land uses in disharmony with the landscape; effects of the dumping of rubbish;*
 - (iv) *the spread of undesirable plants.*

Issue 2

Reduced flood-carrying capacity of rivers due to:

- (a) *the effects of land use on any riparian vegetation which contributes positively to flood-carrying capacity;*
- (b) *the accumulation of aquatic and terrestrial plants, and bed material within the beds of rivers which may obstruct water flows;*
- (c) *the effects of tree planting, the deposition of materials, gravel and sand excavation,*

earthworks, and erection of buildings and structures within the beds and margins of rivers on flood flows; and

- (d) *the effects of land use activities on the stability or performance of flood mitigation works.*

Issue 3

Land use activities causing adverse effects on the stability or performance of essential structures within river beds and their margins.

Adverse effects include:

- (a) *undermining or scouring of banks or structures;*
- (b) *diversion of water flows;*
- (c) *impeding the flow regime of a river;*
- (d) *uncovering or damaging a buried structure; and*
- (e) *deposition or excavation of bed material.*

Essential structures include bridges, fords, pylons, pipeline crossings, structures for the diversion and conveyance and discharge of water, and dams.

Issue 4

Public access needs and conflicts arising from:

- (a) *restrictions on public access to and along rivers and lakes including:*
 - (i) *inadequate provision for access;*
 - (ii) *denial of access along legal roads and public rights of way by land owners or occupiers;*
- (b) *infringement of private property rights by people seeking access;*
- (c) *lack of opportunity for tāngata whenua to exercise kaitiakitanga.*

Section 84 of the RMA requires regional councils to observe their own regional policy statements. The direction provided by the CRPS has resulted in Environment Canterbury considering it desirable to prepare the Proposed Canterbury Natural Resources Regional Plan (NRRP). The objectives, policies, methods and regional rules within Chapter 8 set out in more detail the direction of the CRPS with regard to the management of the beds and margins of lakes and rivers within the Canterbury region.

The Proposed NRRP beds and margins of lakes and rivers chapter relates to the integrated management of the adverse environmental effects from activities in, on, over or under the beds and margins of lakes and rivers.

1.3.2 Issues addressed in Chapter 6

Many of the matters identified in the CRPS are dealt with through other chapters of the Proposed NRRP. Chapter 6 addresses aspects of each of the four issues. One of the methods the RPS specifies is the preparation of a regional plan to address issues in the beds and margins of lakes and rivers in more detail and to develop rules where they are needed. The advantages of having a chapter of the Proposed NRRP relating to the beds and margins of lakes and rivers are:

- (a) the chapter provides guidelines for consistency in managing the use of the beds and margins of lakes and rivers and allows methods other than regulation to be used, where appropriate
- (b) the chapter provides certainty and clarity for users of the beds and margins.
- (c) without provisions relating to beds of lakes and rivers in a regional plan, section 13 of the RMA requires resource consent for a list of activities, including the placement or use of structures, excavation of bed material and the introduction of any plants. The

development of Chapter 6 of the Proposed NRRP allows Environment Canterbury to design provisions permitting those activities which will have no more than minor effect on the environment (provided conditions are complied with).

The issues addressed in chapter 6 are set out below:

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.**

1.4 Analysis of the objective – the environmental outcome to be achieved

The preceding discussion clearly signals that there are issues that need to be addressed in a regional plan because rules are necessary to avoid every activity requiring consent.

1.4.1 CRPS objectives

The CRPS includes objectives and policies on the beds and margins of lakes and rivers which provide strong direction to the content of Chapter 6 of the Proposed NRRP.

CRPS Chapter 10, Objective 1:

With respect to land use and development within the beds and margins of lakes and rivers, protection, and where appropriate, enhancement of:

- (a) *natural character;*
- (b) *significant habitats of indigenous flora and fauna;*
- (c) *significant natural features and landscapes;*
- (d) *mahinga kai areas, wāhi tapu, and wāhi taonga, and Tāngata Whenua access to these;*
- (e) *habitat values of braided river beds;*
- (f) *significant amenity and recreation values;*
- (g) *heritage values;*
- (h) *significant habitats of trout and salmon;*
- (i) *life-supporting capacity (health) of aquatic and riparian ecosystems.*

The policies to achieve this objective are as follows:

CRPS Chapter 10, Policy 1:

- (a) *Areas within the beds of rivers and lakes and their margins containing important conservation values are to be identified. These include:*
 - (i) *areas of natural character;*
 - (ii) *significant habitats of indigenous flora and fauna;*
 - (iii) *significant natural features and landscapes;*
 - (iv) *areas of mahinga kai, wāhi tapu or wāhi taonga (including historical artefacts, urupā, skeletal remains) and Tāngata Whenua needs for access to them;*
 - (v) *significant amenity and recreation values;*
 - (vi) *significant heritage values;*
 - (vii) *significant habitats of trout and salmon.*
- (b) *Land use or development should avoid causing significant adverse effects on the conservation values contained in areas identified in Policy 1(a).*

- (c) *Prior to identification of areas under Policy 1(a), land use activities on the beds and margins of lakes and rivers should be undertaken at such times or in such ways that their adverse effects on the following values are avoided or mitigated:*
- (i) *habitats of indigenous fauna, including international migratory bird species, particularly threatened species, and species rare or endemic within Canterbury;*
 - (ii) *habitats or the unimpeded passage of indigenous fish;*
 - (iii) *areas of indigenous vegetation;*
 - (iv) *wetland areas;*
 - (v) *natural character or significant landscape values;*
 - (vi) *spawning habitats or the unimpeded passage of trout and salmon;*
 - (vii) *amenity and recreation values;*
 - (viii) *heritage sites;*
 - (ix) *Tāngata Whenua values.*

CRPS Chapter 10, Policy 2:

The areas identified in Policy 1(a) and 1(c) should be enhanced where:

- (a) *they exist in a degraded state and enhancement will achieve long-term improvement; and*
- (b) *for areas with important ecological values this will:*
 - (i) *contribute to the indigenous biodiversity of that area, particularly for ecosystem types that are threatened or under-represented in protected areas; or*
 - (ii) *improve the life-supporting capacity of the indigenous ecosystems; or*
 - (iii) *improve or establish connections between habitats and create corridors for wildlife dispersal; and*
- (c) *it will not reduce the flood-carrying capacity of a river; and*
- (d) *it will not cause adverse effects on the stability or performance of essential structures.*

CRPS Chapter 10, Policy 3:

Retain, and promote the establishment of, riparian vegetation particularly indigenous vegetation along the margins of rivers and lakes, to reduce the adverse effects of land use on water quality and to enhance conservation and amenity values.

CRPS Chapter 10, Objective 2:

Protect the flood-carrying capacity of rivers from the adverse effects of land use within the beds and margins of rivers, or the obstruction of waterways by the accumulation of bed material and vegetation.

The policies to achieve this objective are as follows:

CRPS Chapter 10, Policy 4:

Land use within beds and margins of rivers should be undertaken in such a way that any adverse effects on the following values are avoided or mitigated:

- (i) the free passage of floodwaters within the beds; and*
- (ii) the contribution of vegetation or structures to the control of flood flows or the control of erosion.*

CRPS Chapter 10, Policy 5:

Subject to Policy 1, the removal of accumulated vegetation and/or bed material should be promoted where it has reduced the flood-carrying capacity of rivers.

CRPS Chapter 10, Objective 3:

Protection of the stability and performance of essential structures from the adverse effects of land use within the beds and margins of rivers.

Policy 6 is used to achieve objective 3.

CRPS Chapter 10, Policy 6:

Land use activities within the beds and margins of rivers should be undertaken in such a way that any adverse effects on the stability or performance of essential structures are avoided.

The objectives and policies of the CRPS have shaped the Proposed NRRP objectives listed below. There are two areas for which objectives have been developed:

- (a) those activities over which the regional council has a controlling function under sections 13 and 30 of the RMA; and
- (b) those activities where Environment Canterbury cannot have rules but where it can have objectives, policies and methods to achieve integrated management.

1.4.2 Proposed NRRP objective

In view of the RMA and CRPS framework, there is limited scope to have any alternative that is significantly different from that set out below.

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.**

Objective BLR1 is targeted to meet the responsibilities of Environment Canterbury, with regard to riverbed management, under the RMA. In meeting these responsibilities the objective seeks to maintain values, through recognising the importance of managing natural and physical resources sustainably and avoiding or mitigating the effects of natural hazards.

This objective also recognises the link between the rivers, lakes and the Coastal Marine Area. 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.

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 option, 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 the objective to consider the potential damage[E16], as the range of possibilities are too wide, 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 inappropriate introduction, planting, pruning or removal of vegetation. Objective BLR1 seeks to minimise increases in potential flooding of flood-prone areas arising as a result of inappropriate activities within the margins or beds of lakes and rivers.

In addition to people and property, the RMA also requires any effects (of activities) 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, such as, for example, a popular recreation area, or the habitat of a threatened species[E17].

Socio-economic effects s(5)(2)

While Objective BLR1 may result in some limitations on the use of land by the owners of the margins, the individual costs are considered to be outweighed by the benefits to them and to the wider community. Assets of the community and infrastructure that is essential for community functioning and social and economic wellbeing, would be protected, by ensuring that activities within the bed or margin avoid, remedy or mitigate any effects that lead to an increase in the potential for flooding or erosion.

Objective BLR1 provides a framework within which the requirement for resource consent under the section 13(1) may be lifted, to allow those activities where the effects on (a) to (j) of the objective would be no more than minor. This provides the community with clarity and a significant economic benefit, in that many activities with minor effects will not require consent.

Objective BLR1 meets the responsibilities of Environment Canterbury, with regard to river and lakebed management, under the RMA.

Environmental effects s(5)(2a-c), s(6), s(7), s(8)

Objective BLR1 ensures a positive environmental benefit by addressing the purpose and principles of the Act, in particular:

- (a) section 5(2) is addressed by BLR1(a) – (j).
- (b) section 6(a) is addressed by BLR1(b), (c), (d), (i).
- (c) section 6(b) is addressed by BLR1(e).
- (d) section 6(c) is addressed by BLR1(f).
- (e) section 6(e) is addressed by BLR1(h).
- (f) section 7(c) is addressed by BLR1(g).
- (g) section 7(h) is addressed by BLR1(j).
- (h) section 8 is addressed by BLR1(h).

In addition to these aspects of Part II of the RMA, minimising the spreading or colonising of plant pest or undesirable plants in objective BLR1(c) provides a positive benefit for biodiversity within the region.

Does the objective address/resolve all aspects of the issue?

Objective BLR1 addresses all those aspects of the issue that are related to the beds of lakes and rivers.

The objective recognises that the 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, provided certain environmental outcomes can 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.

The objective satisfies the requirements of the CRPS and the purpose of the RMA to provide for the sustainable management of resources and enabling communities to provide for their social, economic and cultural wellbeing.

1.4.3 Objective BLR2:

In view of the CRPS and the issue development framework there is limited scope to have any alternative that is significantly different from that set out below.

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.**

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 sites can cause birds to leave for sufficiently long periods that breeding fails. There are increasing numbers of off

road vehicles in Canterbury, many of which will be used in riverbeds for recreational purposes.

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

Socio-economic effect s(5)(2)

The objective is designed to reduced conflicts between users of the beds of lakes and rivers while still providing opportunities for all users. There may be a cost to some users to relocate or redesign activities within the bed. However this is considered to be outweighed by the benefits of reduced conflict between users and reduced environmental effects.

Environmental effects s(5)(2a-c), s(6), s(7), s(8)

Objective BLR2 seeks to minimise disruption to the breeding success of riverbed birds (some listed as endangered), damage to sites of significant indigenous flora or Ngāi Tahu sites of significance.

The objective contributes to meeting section 6 public access requirements, but seeks arrangements whereby conflicts are minimised between users.

The risk of not including this objective is that the current level of disturbance and damage will go unchecked. The number of off road vehicles is increasing and limitations are being placed on the use of off road vehicles on beaches, which is likely to further increase the use of the riverbeds by people who have limited knowledge about the damage that can occur. This has the potential to significantly increase the disruption to the breeding success of riverbed birds (some listed as endangered) or damage to sites of significant indigenous flora.

Does the objective address/resolve all aspects of the issue?

Objective 2 addresses all those aspects of the issue that are related to the disruption of the breeding success of riverbed breeding birds or damage sites of significant indigenous flora, and in doing so satisfies the requirements of the CRPS.

Proposed objective BLR2 recognises that the location of activities such as the use of recreational and commercial machinery (and their associated noise) in the bed may disrupt the breeding success of riverbed breeding birds (including some threatened or endangered species) or damage sites of significant indigenous flora. The number of off road vehicles is increasing and limitations are being places on the use of off road vehicles on beaches, which is likely to further increase the use of the riverbeds, by people whot have limited knowledge about the damage that can occur. This has the potential to significantly increase the disruption to the breeding success of riverbed birds (some listed as endangered) or damage to sites of significant indigenous flora. The objective is designed to reduced environmental damage and conflicts between users of the beds of lakes and rivers while still providing opportunities for all users.

1.4.4 Conclusion

Having regard to the above evaluation, proposed objectives BLR1 and BLR2, are the most appropriate way to achieve the purpose of the RMA.

1.5 Analysis of policies for achieving Objective BLR1

Given that the above analysis demonstrates that an objective is necessary, the RMA requires that there be associated policies to specify what the council is going to do to achieve the objective. The RMA requires an assessment of the relative efficiency and effectiveness of different options. These two terms have not been defined in the legislation and, therefore, the criteria set out in the introduction has been used to help focus the analysis. Costs and benefits have largely been assessed subjectively and or comparatively because of the great difficulty in assessing/quantifying intangible costs e.g. environmental costs. In some cases quantitative assessments of costs have been given.

The policy alternatives assessed in this section will achieve the objective to different degrees and combinations of policy approaches will be used to form the final preferred option.

1.5.1 Objective BLR1 Policy Options

1.5.1.1 Policy Option 1

Use a non regulatory approach to improve understanding, information and awareness of activities within the margins that increase the potential for flood damage.

Effectiveness	Efficiency	Benefits	Costs	Uncertainty
<p>The overall effectiveness of this option is considered to be moderate.</p> <p>On its own, this option may be insufficient to meet the objective because it will not be able to prevent inappropriate activities from being undertaken in close proximity to beds, where the risk of flooding is relatively high.</p> <p>The effectiveness of this option will depend solely on whether people are willing to change their behaviour in response to information and education on natural hazards.</p> <p>There is a limit as to how far education can go towards addressing tensions between individuals trying to maximize their own benefit versus maximising the benefits for a community.</p>	<p>The relative efficiency of this option as a stand alone option is low, as it provides no guarantee of any benefits, and at its worst, may result in an environmental cost. However, when combined with other policy options (such as regulation) the efficiency of this option is greatly increased.</p>	<p>The overall benefit of this option is considered to be moderate.</p> <p>Environmental benefits:</p> <p>Provided people respond positively and act accordingly there is a decreased risk to people and property, and the natural environment, from inappropriate activities within the margin. Such activities include inappropriate location, design, construction, maintenance, alteration, demolition or removal of structures, or the introduction, planting, pruning or removal of vegetation.</p> <p>Economic benefits:</p> <p>Improved awareness by users of river and lake beds and margins of the effects of flooding on activities within the margins.</p> <p>Improved plan user awareness of the effects of their activities within the margins of lakes and rivers. There is a greater chance that people will obtain the necessary resource consents and that they will not be faced with expense retrospective remediation costs.</p>	<p>The overall cost of this option is considered to be low.</p> <p>Environmental costs:</p> <p>No control over the location or design of activities within the margin.</p> <p>Economic costs:</p> <p>The general cost to the council would be relatively low, perhaps less than \$20000 per year, for production of pamphlets and advertising and other activities to accommodate the intended messages.</p>	<p>The risk of relying exclusively on a non regulatory approach to flood hazard management is that no certainty can be maintained that the policy will reduce the risk of the flooding of surrounding lands.</p> <p>Opportunities to monitor/gather information on the extent/effect of activities are low. Thereby increasing the risk of people, property or environment being adversely affected by natural hazards. However, when this policy option is combined with policy option 2 the uncertainty is significantly reduced.</p> <p>The overall level of uncertainty of this option when combined with policy option 2 is considered to be low.</p>

1.5.1.2 Policy Option 2

Control landuse within the margins of lakes and rivers by establishing setbacks from the bed and flood control structures for activities that increase the potential for flooding or erosion.

Effectiveness	Efficiency	Benefits	Costs	Uncertainty
<p>The effectiveness of this option is considered to be high as those activities that may increase the risk of flooding or soil erosion will be subject to a resource consent.</p>	<p>The relative efficiency of this option is high as it provides a greater likelihood of benefits for people, property and the natural environment, for a minor loss of opportunity cost that would come with the control of activities. The controls would only limit certain types of activities and would not preclude normal uses of the land for economic production (e.g. ongoing pastoral farming or cropping).</p>	<p>The overall benefit of this option is considered to be high.</p> <p>Environmental benefits: Controlling the use of land to reduce the risk of flooding will give a high level of certainty to plan users and communities that activities in close proximity to flood control structures will not reduce the effectiveness of those structures.</p> <p>Economic benefits: The relative economic benefit is considered to be high as it gives the community certainty that activities on, or in close proximity to flood control structures are not resulting in adverse effect – leading to flooding of surrounding land.</p> <p>Social benefit: Significant benefit to people and property through protecting the integrity of flood control structures.</p>	<p>The overall cost of this option is considered to be low.</p> <p>Environmental costs: None.</p> <p>Economic costs: Some land use in close proximity to flood control structures may be restricted, thereby limiting the economic gain of an individual through limiting the activities that can be undertaken. However, the extent of the area affected is likely to be fairly limited on any one individual's property as the setback distance proposed is only 7.5 metres. In many cases, the individual is also a beneficiary of the flood control structure and the land can still be used productively (through activities such as grazing/cropping).</p>	<p>There is no significant risk arising from including this policy option. the use of setbacks as a regulatory tool has been used successfully (through general authorisations) for many years in Canterbury. Consequently, the overall level of uncertainty of this option is considered to be low.</p> <p>There is a level of uncertainty due to the variations in geomorphologic locations that this policy addresses. The result of this is that in some instances the setbacks from the margins of lakes and rivers may be less than ideal, while in others, it may be more than is required. This uncertainty would be difficult to overcome without site specific investigations and monitoring. However, there is a greater uncertainty, social, economic and environmental costs through not utilising this policy option (activities that will impact on flood flows, erosion or flood control structures).</p>

1.5.1.3 Policy Option 3

Permit section 13(1) activities within the bed where the adverse effects are no more than minor (e.g. the activity does not result in increased potential of erosion or flooding of surrounding land or the introduction of pest plants).

Effectiveness	Efficiency	Benefits	Costs	Uncertainty
<p>The relative effectiveness of this option is considered to be high, although there are variable factors on which its effectiveness will depend, including the level of activity permitted and the levels of non compliance with permitted activity conditions.</p> <p>The policy option places an onus on Environment Canterbury to monitor permitted activities for compliance.</p> <p>This policy option is consistent with the objective as 'enabling' people to use the beds of lakes and rivers is acceptable provided conditions are established that will ensure that no more than minor adverse environmental effects occur. The alternative to permitting section 13(1) activities is to require consent for all such activities. Such an approach would not be consistent with the purpose of the RMA.</p>	<p>The relative efficiency of this option is considered to be high, as in the absence of permitted activity rules, everyone would require a consent for a section 13(1) activity.</p> <p>This option provides control of those activities that cannot meet the permitted conditions, while freeing up those activities that have no more than minor effect from getting consent.</p>	<p>The overall benefit of this option is considered to be high.</p> <p>Environmental benefits:</p> <p>Activities are undertaken subject to conditions designed to avoid more than minor effect on the environment.</p> <p>Economic benefits:</p> <p>Provides a clear statement of requirements to plan users, resulting in increased certainty.</p> <p>Activities with more than minor adverse effects can proceed without the time and cost of having to get consent.</p> <p>Social benefits:</p> <p>Permitting a level of activity in the bed allows people to be 'enabled' in accordance with part II of the RMA.</p>	<p>The overall cost of this option is considered to be low.</p> <p>Environmental costs:</p> <p>Environmental costs of implementing this policy are considered to be low. The policy is designed to reduce the likelihood that activities will impact on the environment, as permitted activities can only occur at a scale/intensity where they do not cause significant adverse effect.</p> <p>Economic costs:</p> <p>The economic cost of implementing this option is low. A key effect of permitting activities is that the cost of monitoring them is borne by the general rate that is paid by everyone. Thus it does create an equality issue, in that the individuals undertaking the activities do not directly pay all the costs of monitoring (unlike consented activities). However, on balance, the community cost is considered to be relatively low, relative to the efficiency gains by freeing up access and use of the beds.</p>	<p>There is a small risk in permitting activities that otherwise require resource consent under the RMA as the activity can be undertaken as of right, with little or no opportunities to monitor the effects of the activity on the environment. However, provided the activities are permitted subject to conditions (to address environmental effects) and that monitoring of adherence to and effectiveness of these conditions is undertaken the effect should be no more than minor (knowledge of river systems is considered to be sufficient to ensure that regional rules can be included within chapter 6). The risk of this is further decreased when this policy option is combined with policy option One.</p> <p>The overall level of uncertainty of this option is considered to be low.</p>

1.5.1.4 Policy Option 4

Rely exclusively on territorial authorities to develop and implement land use controls for activities within the margins of lakes and rivers that increase the potential for flooding.

Effectiveness	Efficiency	Benefits	Costs	Uncertainty
<p>The effectiveness of this option is low as significant time would be required to change district plans. This option would also be insufficient to meet the objective. The option also does not make full effect of Environment Canterbury's natural hazard function.</p> <p>No guarantee that Environment Canterbury objectives would be achieved.</p>	<p>The relative efficiency of this option is low as district plans are already in place, and would therefore require significant cost and time to change. This option would also result in a lack of consistency across the region.</p> <p>Ongoing liaison with TLAs would be required to achieve objectives. More difficult to get a seamless approach across the bed/margin interface.</p> <p>Efficiency would also be reduced due to the fact that Environment Canterbury holds much of the information about riverbeds and flooding.</p>	<p>The overall benefit of this option is considered to be low.</p> <p>Environmental Benefits: None</p> <p>Economic Benefits:</p> <p>Reduced policy implementation costs for the regional council. However, monitoring enforcement costs would likely continue.</p> <p>Applicants only have to deal with one local authority. From a user's perspective administration is more efficient.</p>	<p>The overall cost of this option is considered to be moderate-high.</p> <p>Environmental Costs:</p> <p>the option would result in a lack of consistent approach within the region, which may increase the potential for damage to the natural environment as a result of natural hazards.</p> <p>Economic Costs:</p> <p>there would be a cost to change district plans. Inconsistent approach between districts may increase potential for damage to property as a result of natural hazards.</p>	<p>The risks that may arise from including this policy are high, the approach is considered to be disjointed as it leaves a function of the regional councils (avoidance or mitigation of natural hazards) to the TLAs.</p>

1.5.1.5 Policy Option 5

Have no rules in Chapter 6 of the Proposed NRRP, instead rely on the use of resource consents as established in the RMA s13 to control activities within the beds of lakes and rivers.

Effectiveness	Efficiency	Benefits	Costs	Uncertainty
<p>The overall effectiveness of this option is Low to medium. The range of activities included within section 13 of the RMA would effectively require discretionary activity resource consent from all activities within the bed. This then allows conditions to be placed on all consents to match the nature of the likely effects. While this</p>	<p>Low efficiency as this option would require an extensive range of activities undertaken within the bed to obtain resource consent. For example, children creating small stone dams or taking a bucket full of gravel home would require consent. This would create excessively high cost, be very unpopular, be</p>	<p>The overall benefit of this option is considered to be moderate.</p> <p>Environmental benefits:</p> <p>All activities undertaken in the bed will be assessed on their ability to avoid, remedy, mitigate effects on the environment, thereby ensuring that adverse effects can be properly addressed.</p> <p>Economic and social benefits:</p>	<p>The overall cost of this option is considered to be high.</p> <p>Environmental costs:</p> <p>None.</p> <p>Economic costs:</p> <p>Every activity, even those with little or no effect will require consent as a discretionary activity. The very high</p>	<p>The risk of including this option is that people's ability to be 'enabled' is compromised for activities that do not have a more than minor environmental effect.</p> <p>Each consent would be treated as a discretionary activity (at the council's discretion to grant or</p>

Effectiveness	Efficiency	Benefits	Costs	Uncertainty
<p>would appear to make the effectiveness 'high', it is in fact low to medium as, a lot of people would ignore it and break the law. People undertaking very minor activities with no significant environmental effect, would still be breaking the law, and would be liable for prosecution, if they did not obtain a resource consent. Prosecution would be very unpopular and be seen as unjustified thereby bringing Environment Canterbury, the Proposed NRRP and the RMA into disrepute.</p>	<p>difficult to monitor and enforce, and therefore likely to fail. It would also be unnecessary in terms of the scale, extent and severity of the activity. Given that many of these activities could be undertaken in a way so as to avoid any environmental impact, it would be inefficient to require resource connect for them.</p>	<p>There will be some benefit in that a proposed activity's impact on other activity can be avoided or mitigated. High cost to the community to get consents is likely to out weigh environmental benefits.</p>	<p>cost to the community to get consents is likely to out weigh environmental benefits. There would also be high enforcement and compliance costs.</p>	<p>decline), resulting in a high level of uncertainty. Knowledge of river systems is considered to be sufficient to ensure that regional rules can be included within Chapter 6.</p>

1.5.2 Appropriateness of policy options

Policy option	Effectiveness	Efficiency	Benefits	Costs	Uncertainty	Appropriate to include within Chapter 6
1	M	H	M	L	L	YES
2	H	H	H	L	L	YES
3	H	H	H	L	L	YES
4	L	L	L	M-H	H	NO
5	L-M	L	M	H	H	NO

The above table indicates that the preferred policy options for Objective BLR1 are 1, 2, and 3. The chosen policies are the best combination to achieve the objectives, given that they have the higher levels of effectiveness, efficiency and benefits, versus costs and uncertainty relative to other options. The chosen set of policy options set the scene for a mixture of regulatory and non-regulatory methods of implementation.

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 drafted from options 1, 2 and 3 would ensure that activities in, on, under or over the beds, banks or margins of lakes and rivers do not adversely affect associated values through a use of regulatory and non-regulatory components. This combination 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[E21].

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 transportation and deposition of sediment. The use of policy option 1 will help to increase peoples understanding which may result in a change in behaviour that will assist in the achieving of Objective BLR1.

The margins of beds of lakes and rivers and flood protection structures have an important role in the avoidance of erosion and the flooding of surrounding land. The potential environmental, economic and social cost that can come from flooding and erosion necessitates the inclusion of policy option 2 in Chapter 6.

Section 13(1) of the RMA restricts the:

- (a) use, erection, reconstruction, placement, alteration, extension, removal, or demolition of any structure or part of any structure in, on, or under the bed of any lake or river; or
- (b) excavation, drilling, tunnelling, depositing of substances in, on, or under the bed; or
- (c) introduction or planting of any plant or part of any plant in, on, or under the bed of any lake or river; or
- (d) deposition of any substance in, on of under the bed; or
- (e) reclamation of the bed-

unless expressly allowed by a rule in a regional plan, any relevant proposed regional plan or a resource consent.

The use of policy option 3 would allow many of these activities to be undertaken in such a way, and at such a scale, as to have a no more than minor effect on the environment and to subsequently provide the region with significant environmental, economic and social benefit.

Proposed Policy wording**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.

1.5.3 Objective BLR2 policy options

1.5.3.1 Policy Option 1

Within the beds and margins of lakes and rivers, discourage activities that impact on indigenous bird nesting sites, significant indigenous vegetation, Ngāi Tahu sites of significance or conflicts with other recreational users.

Effectiveness	Efficiency	Benefits	Costs	Uncertainty
<p>The overall effectiveness of this option is low to moderate.</p> <p>The effectiveness of this option will depend solely on whether people are willing to change their behaviour in response to information and education.</p> <p>There is a limit as to how far education can go to addressing tensions between individuals trying to maximize their own benefit versus maximising the benefits for a community.</p> <p>On its own, this option may be insufficient to meet the objective as the regional council does not have the function to create provisions to address all conflicts between users (outside of those conditions attached to resource consent). Consequently, the methods to implement this policy option would be non regulatory.</p> <p>This option would require a concerted effort by both the regional and district councils to be effective. In due course, if this policy was shown to be ineffective then Environment Canterbury could develop rules under section 30(1)(ga) in relation to maintaining indigenous biological diversity.</p>	<p>Relative efficiency of this option is moderate as it provides no guarantee of environmental benefit and incurs continued economic cost to implement. There is no guarantee that increased awareness will result in less environmental damage.</p> <p>While clubs can be targeted to produce or maintain codes of behaviour, it is difficult to target individuals that randomly use the bed.</p>	<p>The overall benefits of this option is moderate-high, as some of the species (e.g. Wrybill Plover) the environmental gains are potentially very high if the council's efforts reduce the risk of mortality.</p> <p>Environmental benefits: Less bird deaths/higher breeding rates Increased awareness of riverbed values and issues of use.</p> <p>Social benefits: Less conflict between users, higher amenity values.</p>	<p>The overall cost of this option is considered to be low.</p> <p>Environmental costs: The environmental cost of this option will depend solely on whether people are willing to change their behaviour in response to information and education.</p> <p>Economic costs: Cost to rate payers to fund education programmes – perhaps \$10000 per annum.</p> <p>Social costs: Some riverbed users, for example trail bikes, 4 wheel drives, would need to move to another part of the river or lake. This may be a less attractive or convenient option for them.</p>	<p>The overall uncertainty of this option is considered to be low.</p> <p>The risk of not creating policy to discourage recreational activities that impact on indigenous bird nesting sites; significant indigenous vegetation or conflicts with other recreational users is that such damage will continue.</p> <p>The number of offroad vehicles is increasing. Options for recreational vehicle use in the coastal marine area are reducing, which will increase the pressure on riverbeds.</p> <p>Issues of uncertainty as the effectiveness of this policy would be addressed by including investigations and monitoring as a method of policy implementation. If these investigations found that environmental damage was continuing then the risk to the environment could be partly addressed through developing rules under section 30(1)(ga) in relation to maintaining indigenous biological diversity.</p>

1.5.3.2 Policy Option 2

Rely exclusively on territorial authorities to develop and implement controls for activities within the beds and margins of lakes and rivers that protect indigenous bird nesting sites; significant indigenous vegetation or reduce conflicts between users.

Effectiveness	Efficiency	Benefits	Costs	Uncertainty
<p>Many district councils have catchall rules that technically could require vehicle owners to get consent to drive across a riverbed. However, riverbeds are not seen as primary areas for many district councils, as they tend to be areas that Environment Canterbury is more heavily involved in. Thus, unless district councils increase their level of activity the objective would not be achieved.</p> <p>No guarantee that Environment Canterbury objectives would be achieved.</p>	<p>The overall efficiency of this option is low as district plans are already in place, and would therefore require significant cost and time to change. In addition to this, a change in mindset may be required as riverbeds are not seen as priority areas for many district councils. This option would also result in a lack of consistency across the region.</p> <p>Ongoing liaison with TLAs would be required to achieve objectives.</p>	<p>The overall benefits of this option are considered to be low.</p> <p>Environmental Benefits: None – continuation of the status quo.</p> <p>Economic Benefits: Reduced policy implementation and monitoring cost for the regional council.</p>	<p>The overall costs of this option are considered to be low.</p> <p>Environmental Costs: The option will result in a lack of consistent approach within the region which may increase the potential for impacts on indigenous bird nesting sites or significant indigenous vegetation.</p> <p>Economic Costs: cost to change district plans.</p>	<p>The risks that may arise from including this policy are high. The approach is considered to be disjointed as it leaves a function of the regional councils to the TLAs.</p>

1.5.4 Appropriateness of policy options

Policy option	Effectiveness	Efficiency	Benefits	Costs	Uncertainty	Appropriate to include within Chapter 6
1	L-M	M	M-H	L	L	YES
2	L	L	L	L	H	NO

The above table indicates that the preferred policy option for Objective BLR2 is option 1. 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. Policy option 1 offers the appropriate management approach to address conflicts within the beds and margins of lakes and rivers.

Proposed Policy wording

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.**

1.5.5 Conclusion

Chosen policies are the most efficient and effective, and taking into account costs and benefits, the most appropriate for achieving the objective.

1.6 Analysis of methods for implementing policies

This section analyses regulatory and non-regulatory methods for implementing the policies. Analysis is presented separately for each policy.

For each method, the analysis follows a consistently used set of headings as follows:

- Effectiveness
- Efficiency
- Benefits
- Costs
- Uncertainty

The analysis concludes with an overall assessment of appropriateness.

The following methods have been evaluated:

1.6.1 Advocacy

The overall framework for environmental management is set by the central government. It has legislated for the Resource Management Act and other environmental legislation and it sets the overall environmental policy.

In the Canterbury region, the implementation of the RMA is a shared responsibility of local government (regional and territorial authorities). Territorial authorities must produce District Plan that focus particularly on land use planning within their districts. These cannot be inconsistent with the CRPS, nor should regional and district plans be inconsistent.

Working alongside government and its agencies and also alongside territorial authorities to ensure a sound, consistent approach to resource management is a key method for implementing the objectives and policies in Chapter 6. Cooperating with other environmental management authorities has the key advantage that all are 'singing the same tune'. Such cooperation is essential to achieve good environmental outcomes and is referred to throughout Chapter 6 as liaison.

Environment Canterbury will seek to advocate for a particular view or policy in order to try and influence agencies, territorial authorities and user groups. There are two types of advocacy – statutory advocacy and non-statutory advocacy.

Statutory advocacy involves promoting specific actions or provisions to avoid effects on the beds and margins of lakes and rivers in statutory documents, such as district plans.

Non-statutory advocacy involves encouraging individuals or particular groups to undertake particular activities. An example is to encourage off road vehicle clubs to develop codes of practice for using the beds of rivers.

Advocacy can be an effective tool for achieving specific objectives, particularly where different organisations or groups are working to achieve similar objectives. The main disadvantage of relying on advocacy is that it does not compel action. Environment Canterbury does not control the final outcome.

As with other alternatives, advocacy is not used alone in Chapter 6, but instead is used to complement other methods of implementation (including regulation).

1.6.2 Information and promotion

The non-regulatory methods of information and promotion recognises the importance of properly informing the public and raising awareness of the values within the region and the potential impacts of activities. They include school visits, seminars, field days, industry discussions, group meetings, the production and circulation of pamphlets on specific topics and the preparation of more comprehensive guidelines on matters pertaining to the appropriate management of beds of lakes and rivers to minimise adverse effects. By collecting and disseminating information, the community is provided with an opportunity to understand and participate in sustainable management practices.

Partnerships need to be formed between Environment Canterbury and the community to ensure technically correct information is available to all parties with an interest in the beds and margins of lakes and rivers.

The main advantage of information and promotion is that when well targeted and received, they can change behaviour in a constructive way that many people feel comfortable with. Many people have an inherent dislike for regulation and so feel more comfortable with non-regulatory approaches. The main disadvantages are that information and promotion do not compel action, and that their effectiveness depends very much on how they are received by the target audience.

1.6.3 Financial incentives and assistance

The provision of financial incentives and assistance may be effective in achieving the outcomes wanted from the management of the region's lakes and river beds. The benefit of this method is to assist in the achievement of a desired outcome through the modification of resource users' behaviour. Financial incentives and assistance may be available in various forms including rewards for achievement, grants for projects under the Environment Enhancement Fund, or grants to cover all or part of the cost of consent charges.

The disadvantages of using financial incentives and assistance is that they can distort the operation of the market if they are considered a subsidy and it can be difficult to quantify intangible costs and benefits to the environment.

1.6.4 Investigations

This method recognises that there is a need to improve our understanding of specific aspects of the beds and margins of lakes and rivers within the region, for example: to improve our understanding of the movement of sand and gravel supplied by rivers to the coast; the effects of human influences on indigenous flora and fauna; Ngāi Tahu sites of significance, river flow and the sediment regime; and the identification of the appropriate locations for extraction of bed material.

Information obtained from investigations will enable better decision making, monitoring of effects, and planning, as well as increasing the potential to promote inter-agency integration and knowledge sharing.

1.6.5 Regional rules

Rules in this chapter have three main functions:

1. To permit activities that Environment Canterbury believes can be carried out without resource consent, provided the appropriate conditions are complied with. Environment Canterbury can then be satisfied that any adverse environmental effects will be no more than minor.
2. To restrict activities where site specific environmental issues need to be addressed to ensure the actual and potential adverse effects of the activity are avoided, remedied or mitigated.
3. To prevent activities occurring which would result in unacceptable adverse effects.

Regulation is the legal means used to control the effects of activities, and in the content of the Proposed NRRP, regulation is primarily by rules.

1.6.6 Resource consents

Resource consents will be used for those activities that cannot comply with the conditions for permitted activity rules. Consent conditions are tailored to deal with any adverse effects of an activity. The method is not optional since a wide range of activities in section 13, including the use and maintenance of structures, excavation, introduction of any plant, deposition or reclamation, can only be undertaken with a consent, unless permitted in a regional plan.

1.6.7 Compliance and enforcement,

Permitted activity and resource consent monitoring assesses compliance with resource consent conditions and impacts from a specific activity. Users of the beds of lakes and rivers are required to comply with the conditions of the rules within the Proposed NRRP. Environment Canterbury will monitor activities within the beds of lakes and rivers on a routine and strategic basis. Responding to complaints and enquiries allows Environment Canterbury to assess the actual or potential effects of activities in the bed of lakes and rivers. It is not possible for Environment Canterbury staff to be aware of all activities being undertaken at any one time. The council therefore relies in part on the public advising it of any activity of concern. Environment Canterbury has an incident hotline and also provides a

customer services department to respond to general public enquiries and complaints. All complaints are responded to and logged into a database.

When someone is not complying with either the conditions of a permitted activity rule or the conditions of a consent, Council will normally require compliance and is likely to specify remediation/mitigation to be undertaken. Prosecution may also be initiated, depending on a range of factors, including the severity and frequency of any breach of the conditions.

1.6.8 Floodplain strategies

Developing floodplain strategies, in partnership with the community will enable a management approach to be designed to suit the uniqueness of a specific area. Such strategies may identify and/or comment on such aspects as the appropriateness of subdivision and land development within the margins of lakes or rivers that are identified as at risk of significant flooding. Appropriate management may include design requirements for buildings, zoning of at risk areas such as public reserves, and/or controlling development.

Service provisions may be used in partnership with the development of a floodplain strategy, whereby Environment Canterbury through consultation with the community may undertake physical works e.g. stopbanks or tree planting, and recover the cost of that natural hazard management work from the community that benefits. Payment is proportional to the benefits recovered. This provides more equitable treatment of ratepayers who benefit from works such as drain maintenance, flood protection works and gravel removal.

1.6.9 Reserve ranger

Providing a reserves ranger will enable Environment Canterbury to monitor activities on Council reserve land, promote the appropriate location and timing of activities within the beds and margins, highlight to users the impact that activities may have on other users and/or the natural environment and promote a separation of conflicting activities. The ranger can provide an educational and enforcement role through their onsite presence. The matters addressed by this chapter form only part of the role of the reserves ranger.

1.6.10 Response to complaints and enquiries

Environment Canterbury has an incident hotline and also provides a customer services department to respond to general public enquiries and complaints. All complaints are responded to and logged into a database. Environment Canterbury staff may make a visit to the site, outline the responsibilities of the alleged offender and present a copy of the appropriate rules if an offence has actually occurred.

1.6.11 Evaluation of methods to implement Policy BLR1

Alternative Methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty
Advocacy	<p>The overall effectiveness of this method is considered to be moderate.</p> <p>As a stand alone method advocacy has limited effectiveness as no guarantee of outcomes. However, when combined with regulation the effectiveness of this method is greatly improved, as people become aware that there is enforcement behind the persuasion approach.</p> <p>Effectiveness dependent on willingness of parties to change behaviour, which is not guaranteed.</p> <p>Effectiveness can also depend on the resources/effort the council is willing to invest in advocacy as an ongoing tool.</p>	<p>The overall effectiveness of this method is considered to be moderate.</p> <p>The method is easy to administer, but has variable ability to achieve the objective. There is no guarantee that advocacy will result in a change in behaviour – consequently advocacy can have a low efficiency. However, if advocacy does result in change, then it has a high level of efficiency.</p>	<p>The overall benefit of this method is considered to be high.</p> <p>Cannot predict level of benefits to environment.</p> <p>Potential social benefits if it encourages better working relationships between stakeholder groups.</p> <p>Encourages behaviour changes.</p> <p>Low cost to council to administer.</p>	<p>The overall cost of this method is considered to be low.</p> <p>Low costs to council to undertake role of advocate (essentially staff time).</p> <p>No guarantees that advice will be acted on. If advice is not taken then adverse effects to people, property and the environment may continue to occur.</p>	<p>The overall uncertainty of this method is considered to be low.</p> <p>The risk associated with including this method is that it is difficult to measure whether there has been a real change in behaviour (there is a level of uncertainty as to outcomes). Despite this, the risk associated with not including this method is considered to be higher as advocacy has the potential for raising awareness and changing behaviour over the life of this plan. When combined with other methods Advocacy should be a valuable method of policy implementation.</p> <p>This method would not be used alone to implement policy BLR1, but would be used in conjunction with regional rules. If permitted activity rules were very broad, such that almost any activity could occur, then much greater importance has to be placed on making sure non-regulatory methods were being effective at informing/encouraging other people to do the right thing. However the permitted activity rules on Chapter 6 are fairly limited as to what is allowed without consent so activities that could have a significant adverse effect require consent. This reduces the reliance on information/encouragement type of methods. However, rules by themselves will not achieve the objective and therefore the non-regulatory methods including advocacy have a role. The level of risk to the environment of including/excluding advocacy has to be targeted to achieve a specific end, this is the case with policy BLR1</p>
Investigations	<p>The overall effectiveness of this method is considered to be high.</p> <p>The improved understanding that will result from the investigations</p>	<p>The overall efficiency of this method is considered to be high.</p> <p>Investigations target a</p>	<p>The overall benefits of this method is considered to be high:</p> <p>Will improve basis to identify</p>	<p>The overall cost of this method is considered to be low.</p> <p>Relatively low cost to council</p>	<p>The overall uncertainty of this method is considered to be low.</p> <p>The risk of not acting to undertake investigations is that further knowledge of the specific matters</p>

Alternative Methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty
	<p>identified will help ensure that policies and methods are properly designed. In the absence of sufficient knowledge, investigations are fundamental to provide adequate information for decision making.</p> <p>Increases Council's effectiveness in assessment and monitoring of activities</p> <p>Effective in targeting methods to areas of greatest risk</p>	<p>specific issue, often at a specific location and provide valuable information, at a relatively low cost, that can be used to benefit the design of other policies and methods.</p>	<p>and target high risk areas and activities</p> <p>Should improve efficiency of Council as it tries to achieve the objective</p> <p>Will improve basis for reviewing policies and methods.</p>	<p>to undertake or support investigations – perhaps \$20,000 per annum.</p> <p>On its own will not prevent activities having adverse effects on environment. However, coupled with regulation the potential for ongoing effect on the environment is significantly reduced.</p>	<p>identified in the investigations will not be gathered (investigations decrease uncertainty overtime). Until that information is available and analysed, the issue may not be able to be resolved.</p> <p>There is no significant risk of acting to implement this method, which when combined with a suite of methods will serve to decrease their uncertainty by providing more accurate information on which to base decisions on.</p>
Information and promotion	<p>The effectiveness of this method is considered to be moderate.</p> <p>Effective in raising awareness and understanding of issue.</p> <p>The information can be provided to a sufficiently large number of people carrying out the activity in order to bring about effective change.</p> <p>Effectiveness depends on people's willingness and ability to change behaviour, which is not guaranteed.</p> <p>Increased effectiveness when supported by other methods, including: regional rules, compliance and enforcement.</p> <p>Increases effectiveness of other methods, including: advocacy, and conditions on resource consents.</p>	<p>The overall efficiency of this method is considered to be moderate.</p> <p>Information and promotion can target a specific issue and provide valuable information to a community at a relatively low cost.</p>	<p>The overall benefits of this method is considered to be high:</p> <p>Increases awareness of issues and opportunities to change behaviour.</p> <p>Benefits to the environment will depend on people's willingness to change behaviour.</p> <p>Should increase compliance with regional rules.</p>	<p>The overall cost of this method is considered to be low:</p> <p>Cost to Council to research and provide information, produce pamphlets, maintain databases etc.</p> <p>Requires ongoing updating of information in response to new data and research.</p> <p>Provides no guarantee of changes to behaviour</p>	<p>The overall uncertainty of this method is considered to be low.</p> <p>The risk associated with including this method is that it is difficult to measure whether there has been a real change in behaviour (there is a level of uncertainty as to outcomes). Despite this, the risk associated with not including this method is considered to be higher as information and promotion has the potential for raising awareness and changing behaviour over the life of this plan. When combined with other methods Information and promotion should be a valuable method of policy implementation.</p>
Regional rules	<p>Regional rules (especially permitted activity rules) provide a clear understanding for the plan user to establish what issues need to be addressed in order to avoid, remedy, mitigate potential</p>	<p>The overall efficiency of this method is considered to be high.</p> <p>Permitted activities state what can be undertaken in the beds of lakes and</p>	<p>The overall benefit of this method is considered to be high:</p> <p>Regional rules provide certainty of requirements and conditions of resource</p>	<p>The overall cost of this method is considered to be low:</p> <p>Cost to council and community (via general rate) to monitor permitted activity</p>	<p>The risk of not acting to provide a range of regional rules (especially permitted activities) is that people may not be enabled to provide for their social, economic or cultural wellbeing, due to the restrictions set under the RMA.</p> <p>The risk of acting is that a level of effect will</p>

Alternative Methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty
	effects from activities. They also provide certainty and clarity. Overall the use of regional rules to implement Policy BLR1 will have a high overall effectiveness	rivers without consent. They provide certainty for plan users and the council alike.	use. Permitted activities rules allow equity of opportunity for all land holders to undertake activities that have minor effects on the environment. Significant benefit in that regional rules remove the blanket resource consent requirement established in section 13 of the act.	rules.	become permitted. However, the information surrounding the effects of activities in the bed and margins is considered to be high enough to allow reasonable thresholds to be set for permitted activities that will ensure that any effect is no more than minor. The risk of effects, including cumulative effects is significantly reduced when this method is combined with investigations and the monitoring of permitted activities and resource consents.
Resource Consents	The overall effectiveness of this method is considered to be high as it provides an avenue to address the environmental effects that arise from a specific activity in a specific location.	The overall efficiency of this method is considered to be high. Resource consents will be used for those activities that cannot comply with the conditions for permitted activity rules. Consent conditions are tailored to deal with any adverse effects of an activity. The method is not optional since a wide range of activities in section 13, including the use and maintenance of structures, excavation, introduction of any plant, deposition or reclamation, can only be undertaken with consent, unless permitted in a regional plan.	The overall benefit of this method is considered to be high. High degree of environmental benefit as each activity can be assessed for its impact. High economic benefit as Environment Canterbury's costs are recoverable through user pays.	The overall cost of this method is considered to be low. The cost of the resource consent is covered by the applicant (user pays).	There is no risk to the environment from including this method.
Compliance and	The effectiveness of this method is considered to be high.	The efficiency of this method is considered to be high as it is supported	The benefit of this method is considered to be high.	The cost of this method is considered to be low.	The overall uncertainty of this method is considered to be low.

Alternative Methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty
enforcement	<p>Increases effectiveness of other methods.</p> <p>Effectiveness depends on level of monitoring and enforcement.</p> <p>Effectiveness will depend on certainty of resource consent conditions.</p> <p>supported by a range of compliance and enforcement powers under the RMA</p>	<p>by a range of compliance and enforcement powers under the RMA.</p>	<p>Compliance with the conditions placed on resource consents and permitted activities can be monitored, and enforced.</p> <p>Self monitoring of conditions by developers provides an element of user pays and reduces cost to council.</p>	<p>Cost to Council for monitoring and enforcement of permitted activity conditions. Council can choose how much money it commits to monitoring permitted activities.</p> <p>However, within the life of the plan sufficient monitoring needs to have been done to determine whether, upon review of the plan, any amendments are needed. It would probably take less than 10% of a monitoring officer's time, per year, to monitor permitted activities for Chapter 6 at a surveillance level sufficient see whether unanticipated problems were occurring.</p> <p>Cost to landholders for monitoring of consent conditions.</p>	<p>The risk of providing compliance and enforcement as a method is no more than minor. The method reduces levels of uncertainty by monitoring the level of compliance with other methods (regional rules and resource consents).</p> <p>The risk of not acting to provide compliance and enforcement as a method is that the level of uncertainty as to the effectiveness of other methods (regional rules and resource consents) would be greatly increased.</p> <p>There is no significant risk of acting to implement this method, which when combined with a suite of methods will serve to decrease their uncertainty by providing more accurate information on which to base decisions.</p>
Response to complaints and enquiries	<p>The effectiveness of this method is considered to be moderate, as it will depend on public knowledge of the service and willingness to use it. This method's effectiveness also depends on how quickly complaints are made after the event, and whether ECan can respond in time so as action can be taken.</p>	<p>The efficiency of this method is considered to be moderate as each action is in direct relation to a customer complaint or enquiry.</p> <p>Efficiency depends on how quickly complaints are made after the event, and whether ECan can respond in time so as action can be taken.</p>	<p>The benefits of this method are considered to be moderate.</p> <p>Information on types of activities, conditions and locations can be passed to the public, reducing the risk of non-compliance.</p> <p>Non-compliance with plan provisions can be quickly addressed by the council.</p>	<p>The cost of this method is considered to be moderate.</p> <p>There is a cost to council to respond to complaints and enquiries. If this leads to prosecution, then costs can be considerable.</p> <p>A considerable amount of staff time can be spent following these up, sometimes with no clear outcome.</p>	<p>The risks of including this method are no more than minor. There is a degree of uncertainty as to the willingness of people to change behaviour based on the information they receive. However this is considered to be minor and outweighed by the benefits of this method.</p> <p>The risk of not including this method is that non compliance (with the plan or the RMA) incidences may increase.</p>
Floodplain strategies	<p>The effectiveness of this method is high.</p>	<p>The efficiency of this method is considered to</p>	<p>The benefits of this method are considered to be high.</p>	<p>The cost of this method is considered to be moderate</p>	<p>There is no significant risk of including this method, apart from the uncertainty of not</p>

Alternative Methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty
	<p>Increases Council's effectiveness in assessment and monitoring of activities.</p> <p>Effective in targeting geographically unique situations.</p> <p>This method is non regulatory therefore peoples changes in behaviour are not guaranteed.</p> <p>Service provision is effective as it targets those people that benefit from natural hazard avoidance works.</p> <p>Financial incentives and assistance may increase effectiveness of, and compliance with, other methods</p>	<p>be high.</p> <p>Allows provisions to be drafted to suit a specific location or community situation.</p>	<p>Benefits to people, property and the natural environment through the development of unique provisions for a geographical location.</p> <p>Service provision has the benefit of promoting user pays.</p> <p>Financial incentives and assistance will reinforce behaviour changes if incentives are sufficiently attractive</p>	<p>to high.</p> <p>Cost to council to identify benefactors and to administer variations in charges or rates for service provision.</p> <p>The cost of undertaking floodplain investigations and public consultation can run into several hundred thousand dollars. However, compared to future costs of flood damages that are avoided because of floodplain strategies, there is likely to be a significant net benefit.</p>	<p>knowing if changes in behaviour will result.</p> <p>The risk of not including this method is that localised information about such issues as flood risk or soil erosion would not be used to draft provisions designed to suit the specific location.</p>
Reserve ranger	<p>The effectiveness of this method for the implementation of Policy BLR1 is low.</p> <p>Increases council's effectiveness in assessment and monitoring of activities.</p> <p>Effective in targeting specific areas only.</p>	<p>The efficiency of this method is low.</p> <p>For the range of activities and the area in which the activities of policy BLR1 cover, the efficiency would be very low.</p>	<p>The benefits of this method are considered to be low.</p> <p>Will improve the ability to identify and target high risk areas and activities.</p> <p>Will improve efficiency of Council to achieve objectives.</p> <p>Will be able to provide information that can be used to review policies and methods.</p> <p>Will be insufficient to address the range of aspects covered by policy BLR1.</p>	<p>The cost of this method is considered to be moderate.</p> <p>Cost to council to fund reserves ranger.</p> <p>High cost to cover the diversity of aspects in policy BLR1.</p>	<p>There is a high level of uncertainty as the method does not cover the geographic area that the policy addresses.</p> <p>There is no significant risk from not including this method.</p>

1.6.11.1 Appropriateness of methods to implement Policy BLR1

Alternative methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty	Appropriate to include within Chapter 6
Advocacy	Moderate	Moderate	High	Low	Low	YES
Investigations	High	High	High	Low	Low	YES
Information and promotion	Moderate	Moderate	High	Low	Low	YES
Regional rules	High	High	High	Low	Low	YES
Resource consents	High	High	High	Low	Low	YES
Compliance and enforcement	High	High	High	Low	Low	YES
Response to complaints and enquiries	Moderate	Moderate	moderate	moderate	Low	YES
Floodplain strategies	High	High	High	moderate-high	Low	YES
Reserve ranger	Low	Low	Low	Moderate	High	NO

The above table indicates the preferred suite of methods to implement Policy BLR1. Given that they have the higher levels of effectiveness, efficiency and benefits, versus costs and uncertainty relative to other options, they make the most appropriate means of implementing Policy BLR1.

Policy BLR1 and its associated suite of methods is designed to ensure that activities in, on, under or over the beds, banks 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 8 are not inconsistent with relevant parts of the CRPS[E27].

1.6.12 Evaluations of methods to implement Policy BLR2

Alternative Methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty
Advocacy	The overall effectiveness of this method is considered to be moderate. As a stand alone method advocacy has limited effectiveness as no guarantee of outcomes. However, when combined with regulation the	The overall effectiveness of this method is considered to be moderate. The method is easy to administer, but has variable ability to achieve the objective. this is	The overall benefit of this method is considered to be high. Cannot predict level of benefits to environment. Potential social benefits if it encourages better working relationships between	The overall cost of this method is considered to be low. Low costs to council to undertake role of advocate (administration costs). No guarantees that advice will be acted on. If advice is	The overall uncertainty of this method is considered to be low. The risk to the environment associated with including this method is that there is no way to know if changes in behaviour will result (there is a level of uncertainty as to outcomes). Despite this, the risk associated with not including this method is considered to be higher as advocacy

Alternative Methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty
	<p>effectiveness of this method is greatly improved.</p> <p>Effectiveness dependent on willingness of parties to change behaviour, which is not guaranteed.</p> <p>Effectiveness can also depend on the resources/effort the council is willing to invest in advocacy as an ongoing tool.</p>	<p>because there is no guarantee that advocacy will result in a change in behaviour – consequently advocacy can have a low efficiency. However, if advocacy does result in change, then it has a high level of efficiency.</p>	<p>stakeholder groups.</p> <p>Encourages behaviour changes.</p> <p>Low cost to council to administer</p>	<p>not taken then adverse effects to people property and the environment may continue to occur.</p>	<p>is a valuable method of raising awareness and changing behaviour over the life of this plan.</p> <p>When combined with other methods advocacy is a valuable method of policy implementation.</p>
Investigations	<p>The overall effectiveness of this method is considered to be high.</p> <p>The improved understanding that will result from the investigations identified will help ensure that policies and methods are properly designed. In the absence of sufficient knowledge, investigations are fundamental to provide adequate information for decision making.</p> <p>Increases Council's effectiveness in assessment and monitoring of activities</p> <p>Effective in targeting methods to areas of greatest risk</p>	<p>The overall efficiency of this method is considered to be high.</p> <p>Investigations can target a specific issue, such as the impact of vehicles on biological diversity within the bed, often at a specific geographical location and can provide valuable information, at a relatively low cost, that can be used to benefit the design of other policies and methods.</p>	<p>The overall benefits of this method is considered to be high:</p> <p>Will improve basis to identify and target high risk areas and activities</p> <p>Will improve efficiency of Council to achieve objective</p> <p>Will improve basis for reviewing policies and methods.</p>	<p>The overall cost of this method is considered to be low.</p> <p>Cost to council to undertake or support investigations.</p> <p>On its own will not prevent activities having adverse effects on environment.</p> <p>However, when the information is used to support actions (such as regulation) the potential for ongoing effect on the environment is significantly reduced.</p>	<p>The overall uncertainty of this method is considered to be low.</p> <p>The risk of not acting to undertake investigations is that further knowledge of the specific matters identified in the investigations will not be gathered (investigations decrease uncertainty overtime). Until that information is available and analysed, the issue may not be able to be resolved.</p> <p>There is no significant risk of acting to implement this method which, when combined with a suite of methods will serve to decrease their uncertainty by providing more accurate information on which to base decisions on.</p>
Regional rules	<p>Regional rules (especially permitted activity rules) provide a clear understanding for the plan user to establish what issues need to be addressed in order to avoid, remedy or mitigate potential effects from activities.</p> <p>They provide certainty and clarity.</p> <p>Regional rules that would limit access to parts of the beds of lakes and rivers would need to be developed based on scientifically sound information. Without such</p>	<p>The overall efficiency of this method is considered to be high.</p> <p>Permitted activities state what can be undertaken in the beds of lakes and rivers without consent.</p> <p>They provide certainty for plan users and the council alike.</p>	<p>The benefit of this method is considered to be high:</p> <p>Regional rules provide certainty of requirements and conditions of resource use.</p> <p>Permitted activities rules allow equity of opportunity for all land holders to undertake activities that have minor effects on the environment.</p>	<p>The overall cost of this method is considered to be medium:</p> <p>Utilising a new function of the regional council (section 13(1)(ga) will require legal opinions of the powers of the regional council, background investigations as sites that access may need to be restricted too, and education of the public to overcome the perceptions people may</p>	<p>The uncertainty of including this method is high.</p> <p>The recent changes to the RMA appear to give the regional council the power to regulate activities within the beds and margins of lakes and rivers in order to maintain indigenous biological diversity. However, this 'new function' has yet to be legally tested. Further, it is preferable to see if non regulatory approaches will achieve the outcome.</p> <p>Before this method could be used significant background information would need to be gathered to ensure that any controls on the location of activities were justified and fair,</p>

Alternative Methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty
	information, gained through investigations the effectiveness of this method would be low.			have of free and uncontrolled access to the beds. It is premature at this stage to include rules as it would be very difficult to police them.	practical and able to be implemented.
Reserve ranger	The effectiveness of this method is considered to be moderate. Increases Council's effectiveness in assessment and monitoring of activities Effective in targeting specific areas	The efficiency of the method is considered to be Moderate as it will geographically limited to ECan land, which does not address activities outside this area.	The benefit of this method is considered to be high. Will improve the ability to identify and target high risk areas and activities. Will improve efficiency of council to achieve objectives Will be able to provide information that can be used to review policies and methods.	Moderate cost to council to fund reserves ranger.	The risk of not acting to provide a reserves ranger on Environment Canterbury land is that site specific information, including rapid identification of changes to an area may not be identified. There is no significant risk in providing this method.

1.6.12.1 Appropriateness of methods to implement Policy BLR2

Alternative methods	Effectiveness	Efficiency	Benefits	Costs	Uncertainty	Appropriate to include within Chapter 6
Advocacy	Moderate	Moderate	High	Low	Low	YES
Investigations	High	High	High	Low	Low	YES
Information and promotion	Moderate	Moderate	High	Low	Low	YES
Regional rules	low	High	High	Moderate	High	NO
Reserve ranger	Moderate	Moderate	High	Moderate	Low	YES

The above table indicates the preferred suite of methods to implement Policy BLR2. Given that they have the higher levels of effectiveness, efficiency and benefits, versus costs and uncertainty relative to other options they make the most appropriate means of implementing Policy BLR2.

Activities in the beds of lakes and rivers 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.

1.7 Regional rule analysis

1.7.1 Rule table

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
<p>Rule BLR1 Use, reconstruction, alteration, extension, demolition or removal of existing structures - permitted Activity.</p> <p>This rule allows the use, reconstruction, alteration, extension, demolition or removal of legally established structures within the bed or a lake of river. The reason for allowing these activities as permitted is to remove the requirement, under section 13 of the RMA, to get resource consent. This reduces the costs associated with undertaking an activity which will have no more than minor effect on the environment (provided the conditions of the rule are met). This rule does not cover any damming or diversion of water, which are covered in other chapters of the Proposed NRRP.</p>	<p>The overall effectiveness of this rule is considered to be high. Rule BLR1 provides plan users with a clear understanding of the level of activity that that can be undertaken and the conditions of resource use.</p> <p>The rule avoids thousands of recreational users of river and lakebeds from having to get consent under section 13 of the RMA.</p> <p>The rule is considered to be workable, and should achieve a high-level of compliance, as the conditions are effects based and clearly state those effects that must be avoided.</p>	<p>The overall efficiency of this rule is considered to be high.</p> <p>Permitted activities state what can be undertaken in the beds of lakes and rivers without consent. They provide certainty for plan users and the council alike.</p>	<p>Rule BLR1 allows equity of opportunity for all plan users to undertake activities that have minor effects on the environment.</p> <p>The rule may form a synergistic relationship with chapter 4, by allowing bridge stock crossings that will allow stock to be removed from the bed thereby improving water quality.</p> <p>No cost to people to apply for consent.</p>	<p>Small cost to landowner to comply with rules. However, this is significantly less than the cost of applying for resource consent if Rule BLR1 did not exist.</p> <p>Cost to council and community (through general rate) to undertake monitoring of permitted activities.</p>	<p>The use, reconstruction, alteration, extension, demolition or removal of structures in, on, under or over the bed of a lake or river is restricted by section 13 of the Act. Rule BLR1 allows the use, reconstruction, alteration, extension, demolition or removal of structures within the bed or a lake of river provided the conditions of the rule are complied with. The conditions of the rule are designed to ensure that the effects of that activity are minor.</p> <p>Conditions 1 and 2 are designed to ensure that the reconstruction, alteration or extension of a structure does not allow that structure to exceed the level of activity permitted by rule BLR2.</p> <p>Condition 4 provides for fish spawning and passage, to address aspects of sections 6 and 7 of the Act.</p> <p>Condition 5 restricts the introduction or planting of plants to those species that are not undesirable. The list of species largely reflects those controlled through the Regional Pest Management Strategy (RPMS), with the addition of Russell Lupins and Cracked Willow, which are considered to be undesirable within the beds and margins of lakes and rivers, due to the ease in which they can overtake these areas.</p> <p>Rule BLR1 is an appropriate method of implementation for policy BLR2 as it enables communities to provide for their social, cultural and economic wellbeing without resulting in a more than minor effect on the environment.</p>	BLR1
<p>Rule BLR2 Erection or placement of structures - permitted activity.</p>	<p>The overall effectiveness of this rule</p>	<p>The overall efficiency of this</p>	<p>Rule BLR2 allows equity of opportunity</p>	<p>Small cost to landowner to comply</p>	<p>The erection or placement of structures in, on, under or over the bed of a lake or river is restricted</p>	BLR1

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
<p>The erection or placement of structures in, on, under or over the bed of a lake or river is restricted by section 13 of the RMA. Rule BLR2 has been designed to allow the placement of minor structures in, on, over or under rivers and streams. The reason for allowing these activities as permitted is to remove the requirement, under section 13 of the RMA, to get resource consent. This reduces the costs associated with undertaking an activity which will have no more than minor effect on the environment (provided the conditions of the rule are met).</p>	<p>is considered to be high.</p> <p>Rule BLR2 provides plan users with a clear understanding of the level of activity that that can be undertaken and the conditions of resource use.</p> <p>The rule is considered to be workable, and should maintain a high-level of compliance, as the conditions are effects based and clearly state those effects that must be avoided.</p>	<p>rule is considered to be high.</p> <p>Permitted activities state what can be undertaken in the beds of lakes and rivers without consent. They provide certainty for plan users and the council alike.</p>	<p>for all plan users to undertake activities that have minor effects on the environment.</p> <p>The rule may form a synergistic relationship with chapter 4, by allowing bridge stock crossings that will allow stock to be removed from the bed thereby improving water quality.</p> <p>No cost to people to apply for consent.</p>	<p>with rules. However, this is significantly less than the cost of applying for resource consent if Rule BLR2 did not exist.</p> <p>Cost to council and community (through general rate) to undertake monitoring of permitted activities.</p>	<p>by section 13 of the Act. Rule BLR2 has been designed to allow the placement of minor structures in, on, over or under rivers and streams. The conditions attached to this rule are designed to ensure that the effects of that activity are minor.</p> <p>Condition 2 addresses culturally significant sites in accordance with Part 2 of the RMA.</p> <p>Condition 3 allows crossings to be constructed in beds up to five metres width. This provision allows for the economic and environmental benefits (including water quality) that come from allowing stock crossings and the like, without increasing the potential for flooding of surrounding land. The majority of consents currently sought for small crossings within the bed are to span a bed width less than 5 metres. Provided the conditions of this rule are met crossings across a 5 meter bed width should not result in more than minor environmental effect.</p> <p>Condition 4 allows for the economic and environmental benefits (including water quality) that come from allowing stock crossings and the like, without increasing the potential for flooding of surrounding land. 600 mm clearance allows flood flow debris to pass under the structure.</p> <p>Conditions 5 and 6 allow for the social benefits small dams for water takes, weirs or the like provide while avoiding the environmental costs that may need to be addressed (through the consent process) of larger structures.</p> <p>Condition 7: jetties and whitebait stands can have an effect on the amenity of an area, cause a navigational safety issue of and are often effected and abandoned on a seasonal basis.</p> <p>Condition 8 restricts the introduction or planting of plants to those species that are not undesirable. The list of species largely reflects those controlled through the Regional Pest Management Strategy (RPMS), with the addition of Russell Lupins and Cracked Willow, which are considered to be</p>	

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
					<p>undesirable within the beds and margins of lakes and rivers, due to the ease in which they can overtake these areas.</p> <p>Conditions 9, 11, 12 and 14 are to ensure that any activity is sustainably managed in accordance with the purpose of the RMA by enabling people and communities to provide for their social, economic and cultural wellbeing, while providing a level of protection for the natural environment.</p> <p>Condition 13 provides for fish spawning and passage, to address aspects of sections 6 and 7 of the Act.</p> <p>Condition 15 ensures that the activity does not result in a reduction in amenity values, alterations of flow paths, or hazards for other users of the beds and margins post activity.</p> <p>Rule BLR2 is an appropriate method of implementation for Policy BLR2 as it enables communities to provide for their social, cultural and economic wellbeing without resulting in a more than minor effect on the environment.</p>	
<p>Rule BLR3 Excavation, drilling, tunnelling or disturbance within the bed – permitted activity.</p> <p>Excavation, drilling, tunnelling or disturbance within the bed is restricted under section 13 of the RMA. Excavation, drilling, tunnelling or disturbance within the bed has the potential to impact on rates of erosion, river channel alignment and structure stability. However, the significance of this impact will depend on numerous activity and site-specific elements. The reason for allowing a level of activity as permitted is to remove</p>	<p>The overall effectiveness of this rule is considered to be high.</p> <p>Rule BLR3 provides plan users with a clear understanding of the level of activity that that can be undertaken and the conditions of resource use.</p> <p>This rule is considered to be workable, and should maintain a high-level of compliance, as the conditions are effects based and clearly state those</p>	<p>The overall efficiency of this rule is considered to be high.</p> <p>Permitted activities state what can be undertaken in the beds of lakes and rivers without consent. They provide certainty for plan users and the council alike.</p>	<p>Rule BLR3 allows equity of opportunity for all plan users to undertake activities that have minor effects on the environment.</p> <p>May reduce costs to council to undertake hazard avoidance work (removal of bed material).</p> <p>No cost to people to apply for consent.</p>	<p>Small cost to landowner to comply with rules. However, this is significantly less than the cost of applying for resource consent if Rule BLR3 did not exist.</p> <p>Cost to council and community (through general rate) to undertake monitoring of permitted activities.</p>	<p>Excavation, drilling, tunnelling or disturbance within the bed has the potential to impact on rates of erosion, river channel alignment and structure stability. However, the significance of this impact will depend on numerous activity and site-specific elements. This rule is designed to allow a level of activity, which provided resource users adhere to the conditions, should result in no more than minor effects on the bed.</p> <p>Condition 2 addresses culturally significant sites in accordance with Part 2 of the RMA</p> <p>Condition 3 avoids the removal of large stones that can protect banks or berms, direct flow paths, protect bed stability and contribute to the amenity values of an area.</p> <p>Condition 4(a) allows people and communities access to this resource at a rate which will result in</p>	<p>BLR1</p>

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
the requirement, under section 13 of the RMA, to get resource consent. This reduces the costs associated with undertaking an activity which will have no more than minor effect on the environment (provided the conditions of the rule are met).	effects that must be avoided.				<p>no more than minor effect on the environment.</p> <p>Conditions 4(b) and (c) allow for an increased level of activity in the beds of larger gravel bearing rivers. The list of river reaches listed in schedule 3 and 4 have been drafted for 50m³ and 100m³ per month respectively. At these levels the activity is sustainable without impacting on other activities within the bed. The exclusion covering spring and early summer is in recognition that the larger gravel fairways are sites of bird breeding. Providing for nesting birds helps rule BLR3 meet the purpose and principles of the RMA and Objective BLR1.</p> <p>Under Condition 4 the meaning of person includes the Crown, a corporation and also a body of persons, whether corporate or incorporate. This means that a corporation comprising a group of people or a number of employees is one person. The same applies to an incorporate group or a family. This prevents each individual of those entities being able to take the maximum quantity and pooling them, thereby creating more than minor environmental effects.</p> <p>Condition 5 allows information to be commented to ensure that the level of activity can be monitored.</p> <p>Conditions 6,7,8,9 and 10 are to ensure that any activity is sustainably managed in accordance with the purpose of the RMA by enabling people and communities to provide for their social, economic and cultural wellbeing, while providing a level of protection for the natural environment.</p> <p>Rule BLR3 is an appropriate method of implementation for Policy BLR2 as it enables communities to provide for their social, cultural and economic wellbeing without resulting in a more than minor effect on the environment.</p>	
Rule BLR4 Introduction or planting of plants – permitted	The overall effectiveness of this rule	The overall efficiency of this rule is considered	Rule BLR4 allows equity of opportunity for all plan users to	Small cost to landowner to comply with rules. However,	The introduction of vegetation into the beds of lakes and rivers can potentially compromise other values associated with these water bodies. The	BLR1

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
<p>activity.</p> <p>The introduction of vegetation into the beds of lakes and rivers can potentially compromise other values associated with these water bodies. The CRPS recognises the potential for some activities in the beds of lakes and rivers to adversely impact on the environment. For example (though not limited to), the introduction of vegetation adversely affecting conservation and amenity values including the loss of biodiversity, water quality and reducing the flood-carrying capacity of rivers.</p> <p>Section 13 of the RMA does not allow the introduction of any vegetation unless there is a rule in a plan or a resource consent providing for it. However, in order to meet the requirements of the RMA (in particular section 30 - soil conservation and flood protection, as well as enhancing and maintaining Part II matters) there is a need to allow some planting to be undertaken. Rule BLR4 reduces the costs associated with undertaking an activity which will have no more than minor effect on the environment (provided the conditions of the rule are met).</p>	<p>is considered to be high.</p> <p>Rule BLR4 provides plan users with a clear understanding of the level of activity that that can be undertaken and the conditions of resource use.</p> <p>The rule is considered to be workable, and should maintain a high-level of compliance, as the conditions are effects based and clearly state those effects that must be avoided.</p>	<p>to be high.</p> <p>Permitted activities state what can be undertaken in the beds of lakes and rivers without consent. They provide certainty for plan users and the council alike.</p>	<p>undertake activities that have minor effects on the environment.</p> <p>No cost to people to apply for consent.</p>	<p>this is significantly less than the cost of applying for resource consent if Rule BLR4 did not exist.</p> <p>Cost to council and community (through general rate) to undertake monitoring of permitted activities.</p>	<p>CRPS recognises the potential for some activities in the beds of lakes and rivers to adversely impact on the environment. For example (though not limited to), the introduction of vegetation adversely affecting conservation and amenity values including the loss of biodiversity, water quality, and reducing the flood-carrying capacity of rivers.</p> <p>Section 13 of the RMA does not allow the introduction of any vegetation unless there is a rule in a plan or a resource consent providing for it. However, in order to meet the requirements of the RMA (in particular section 30 - soil conservation and flood protection, as well as enhancing and maintaining Part II matters) there is a need to allow some planting to be undertaken. Provided the introduction or planting of plants complies with the conditions of this rule the effects on beds and margins of lakes and rivers should be minor.</p> <p>Condition 1 excludes the activity from a list of high naturalness and natural state waterbodies. These areas are covered under rule BLR6</p> <p>Condition 2 addresses culturally significant sites in accordance with Part 2 of the RMA</p> <p>Condition 3 restricts the introduction or planting of plants to those species that are not undesirable. The list of species largely reflects those controlled through the Regional Pest Management Strategy (RPMS), with the addition of Russell Lupins and Cracked Willow, which are considered to be undesirable within the beds and margins of lakes and rivers, due to the ease in which they can overtake these areas.</p> <p>Condition 4 provides for fish spawning and passage, to address aspects of sections 6 and 7 of the Act.</p> <p>Conditions 5, 6, and 7 are to ensure that any activity is sustainably managed in accordance with the purpose of the RMA by enabling people and communities to provide for their social, economic and cultural wellbeing, while providing a level of</p>	

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
					<p>protection for the natural environment.</p> <p>Condition 8 recognises that introduced vegetation can reduce water yield and attention is drawn to the separate water yield provisions contained within the Proposed NRRP.</p> <p>Rule BLR4 is an appropriate method of implementation for Policy BLR2 as it enables communities to provide for their social, cultural and economic wellbeing without resulting in a more than minor effect on the environment.</p>	
<p>Rule BLR5 Clearance of vegetation and harvesting practices – permitted activity.</p> <p>The uncontrolled removal of vegetation from the beds of lakes and rivers can potentially compromise other values associated with these water bodies. The removal of vegetation may also adversely affect the stability or performance of essential structures, water quality and habitat values of the beds of lakes and rivers. Rule BLR5 allows a level of activity to be undertaken as permitted. Provided the activity complies with the conditions within this rule, the effects on beds and margins of lakes and rivers should be minor.</p>	<p>The overall effectiveness of this rule is considered to be high.</p> <p>Rule BLR5 Provides plan users with a clear understanding of the level of activity that that can be undertaken and the conditions of resource use.</p> <p>The rule is considered to be workable, and should maintain a high-level of compliance, as the conditions are effects based and clearly state those effects that must be avoided.</p>	<p>The overall efficiency of this rule is considered to be high.</p> <p>Permitted activities state what can be undertaken in the beds of lakes and rivers without consent. They provide certainty for plan users and the council alike.</p>	<p>Rule BLR5 allows equity of opportunity for all plan users to undertake activities that have minor effects on the environment.</p> <p>The rule may reduce costs to council to undertake hazard avoidance work (removal of bed material).</p> <p>No cost to people to apply for consent.</p>	<p>Small cost to landowner to comply with rules. However, this is significantly less than the cost of applying for resource consent if Rule BLR5 did not exist.</p> <p>Cost to council and community (through general rate) to undertake monitoring of permitted activities.</p>	<p>The removal of vegetation from the beds of lakes and rivers can potentially compromise other values associated with these water bodies. The removal of vegetation may also adversely affect the stability or performance of essential structures, water quality and habitat values of the beds of lakes and rivers. However, provided the activity complies with the conditions within this rule the effects on beds and margins of lakes and rivers should be no more than minor.</p> <p>Condition 1 excludes the activity from a list of high naturalness and natural state waterbodies. These areas are covered under rule BLR6</p> <p>Condition 2 addresses culturally significant sites in accordance with Part 2 of the RMA</p> <p>Conditions 3, 4, 5 and 7 are to ensure that any activity is sustainably managed in accordance with the purpose of the RMA by enabling people and communities to provide for their social, economic and cultural wellbeing, while providing a level of protection for the natural environment.</p> <p>Condition 13 provides for fish spawning and passage, to address aspects of sections 6 and 7 of the Act.</p> <p>Rule BLR5 is an appropriate method of implementation for Policy BLR2 as it enables communities to provide for their social, cultural and economic wellbeing without resulting in a more than minor effect on the environment.</p>	BLR1

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
<p>Rule BLR6 Activities in natural state or high naturalness areas – permitted activity.</p> <p>Rule BLR6 allows small-scale activity in the beds of natural state or high naturalness areas. The activities permitted by this rule are limited in scale or intensity due to the sensitivity of the natural state or high naturalness areas. Allowing a level of activity in these sensitive areas reduces the costs associated with getting resource consent for an activity which will have no more than minor effect on the environment (provided the conditions of the rule are met).</p>	<p>The overall effectiveness of this rule is considered to be high.</p> <p>Rule BLR6 Provides plan users with a clear understanding of the level of activity that that can be undertaken and the conditions of resource use.</p> <p>The rule is considered to be workable, and should maintain a high-level of compliance, as the conditions are effects based and clearly state those effects that must be avoided.</p>	<p>The overall efficiency of this rule is considered to be high.</p> <p>Permitted activities state what can be undertaken in the beds of lakes and rivers without consent. They provide certainty for plan users and the council alike.</p>	<p>Rule BLR6 allows equity of opportunity for all plan users to undertake activities that have minor effects on the environment.</p> <p>The rule may form a synergistic relationship with chapter 4, by reducing levels of activities that may contribute to a reduction in water quality.</p> <p>No cost to people to apply for consent.</p>	<p>Small cost to landowner to comply with rules. However, this is significantly less than the cost of applying for resource consent if Rule BLR6 did not exist.</p> <p>Cost to council and community (through general rate) to undertake monitoring of permitted activities.</p>	<p>Rule BLR6 allows small-scale activity in the beds of natural state or high naturalness areas. The activities permitted by this rule are limited in scale or intensity due to the sensitivity of the natural state or high naturalness areas. Provided the conditions of the rule are met, any effect should be no more than minor.</p> <p>Condition 2 addresses culturally significant sites in accordance with Part 2 of the RMA</p> <p>Condition 2 limits the level of activity that can be undertaken these areas of high naturalness and natural state. These activities are those that can be either undertaken with no more than minor effect on the area (including amenity values) or those activities whose effect will be more than offset by the benefits that they provide (stock crossings that remove animals from the bed greatly increase water quality).</p> <p>Conditions 3, 4, 5, 7, 8 and 9 are to ensure that any activity is sustainably managed in accordance with the purpose of the RMA by enabling people and communities to provide for their social, economic and cultural wellbeing, while providing a level of protection for the natural environment.</p> <p>Condition 8 provides for fish spawning and passage, to address aspects of sections 6 and 7 of the Act.</p> <p>Rule BLR6 is an appropriate method of implementation for policy BLR2 as it enables communities to provide for their social, cultural and economic wellbeing without resulting in a more than minor effect on the environment.</p>	BLR1
<p>Rule BLR7 Land use activities within 7.5 metres of the bed or structures – permitted activity.</p> <p>Section 30(1) of the RMA allows the Regional Council to control</p>	<p>The overall effectiveness of this rule is considered to be high.</p> <p>Rule BLR7 Provides plan users with a clear</p>	<p>The overall efficiency of this rule is considered to be high.</p> <p>The rule states</p>	<p>Rule BLR7 allows equity of opportunity for all plan users to undertake activities that have minor</p>	<p>Small cost to landowner to comply with rules. However, this is significantly less than the cost of</p>	<p>Section 30(1) of the RMA allows the Regional Council to control the use of land for the avoidance or mitigation of natural hazards. Rule BLR6 permits activities within close proximity to the bed or any flood control structures provided these</p>	BLR1

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
<p>the use of land for the avoidance or mitigation of natural hazards. Rule BLR6 permits activities within close proximity to the bed or any flood control structures provided these activities do not impact on flooding, erosion or the integrity of flood control structures. This reduces the costs associated with undertaking an activity which will have no more than minor effect on the environment (provided the conditions of the rule are met).</p>	<p>understanding of the level of activity that that can be undertaken and the conditions of resource use.</p> <p>The rule is considered to be workable, and should maintain a high-level of compliance, as the conditions are effects based and clearly state those effects that must be avoided.</p>	<p>what can be undertaken in the margins of lakes and rivers without consent. They provide certainty for plan users and the council alike.</p>	<p>effects on the environment.</p> <p>May reduce costs to council to undertake hazard prevention work (repair of stopbanking).</p> <p>May reduce damage to the banks of lakes and rivers.</p> <p>No cost to people to apply for consent.</p>	<p>applying for resource consent if Rule BLR7 did not exist.</p> <p>Cost to council and community (through general rate) to undertake monitoring of permitted activities.</p>	<p>activities do not impact on flooding, erosion or the integrity of flood control structures.</p> <p>Conditions 1 and 2 allows for the economic and social benefits that come from landuse, without increasing the potential for flooding of surrounding land, or erosion of banks.</p> <p>Conditions 3 and 4 are to ensure that any activity is sustainably managed in accordance with the purpose of the RMA by enabling people and communities to provide for their social, economic and cultural wellbeing, while providing a level of protection for the natural environment.</p> <p>Condition 5 restricts the introduction or planning of plants to those species that are not undesirable. The list of species largely reflects those controlled through the pest plant strategy, with the addition of Russell lupins and cracked willow, which are considered to be undesirable within the beds and margins of lakes and rivers, due to the ease in which they can overtake these areas.</p> <p>Rule BLR7 is an appropriate method of implementation for policy BLR1 as it enables communities to provide for their social, cultural and economic wellbeing without resulting in an increased risk of flooding.</p>	
<p>Rule BLR8 Structures, excavation, planting, deposition, disturbance, or reclamation - discretionary activities.</p> <p>Section 13(1) of the RMA contains a presumption that, unless a rule in a regional plan provides to the contrary, certain uses of riverbeds require resource consent. This rule applies to activities covered by section 13(1) that do not come within the scope of the permitted activity rules in this chapter.</p>	<p>The overall effectiveness of this rule is considered to be high.</p> <p>Rule BLR9 is an effective catchall rule, designed to require full discretionary consent from those activities that cannot meet the requirements of rules BLR1 to BLR8</p> <p>As consent is needed, conditions can be</p>	<p>The efficiency of this method is considered to be high as it is supported by a range of compliance and enforcement powers under the RMA.</p>	<p>Those activities that will have a more than minor effect on the environment can be assessed through the consent process.</p>	<p>Cost to applicant to apply for resource consent.</p>	<p>In preparing this chapter Environment Canterbury recognises that not all activities in the beds of lakes or rivers are going to have significant adverse effects on the environment. For this reason, Environment Canterbury will allow such activities if it is satisfied that they have no more than minor adverse environmental effects. However, where the scale or intensity of an activity is likely to cause more than minor effects on the beds of lakes and rivers, Environment Canterbury will, in accordance with section 13(1) of the RMA, retain the ability to grant or decline resource consent. This approach allows for flexibility in managing uses of river and lake beds that cannot</p>	BLR1

Rule Number	Effectiveness	Efficiency	Benefits	Costs	Appropriateness	Policy link
	tailored to uniquely fit the applicant's activity.				<p>meet the permitted activity conditions, while retaining sufficient certainty for resource users.</p> <p>Unless otherwise provided for under rule BLR1 or BLR2, the use, erection, reconstruction, placement, alteration, extension, removal, or demolition of any structure or part of any structure in, on, under or over the bed of a lake or river is a discretionary activity.</p> <p>Unless otherwise provided for under rule BLR3, extraction of bed materials is a discretionary activity. River systems are complex. Bed materials move through river systems in waves, leaving some areas in a state of degradation and others in a state of aggradation. The amount and the location of material that can be extracted without causing more than minor effect on the bed is constantly changing. In order to ensure that the activity does not lead to the undermining of structures, flooding or surrounding land or erosion of the bed, careful management of the location and amount of material being extracted from the bed is required.</p> <p>Unless otherwise provided for under rules BLR4, BLR5, BLR6 or BLR7, the introduction or planting of plants or the clearance of vegetation and harvesting practices in, on or under the bed of a lake or river is a discretionary activity. The introduction or planting of plants listed within Schedule BLR1 is undesirable. These species are regarded as exotic invaders, capable of displacing native species. Establishing rules to restrict the removal of vegetation is also needed so as to avoid the effects of removal on water quality, soil erosion and flood carrying capacity.</p> <p>The reclamation of the bed of a lake or river that is not associated with a permitted activity within this chapter has the potential to cause more than minor adverse effect. By classifying such activity as discretionary, the rule mimics section 13(1)(e) of the RMA, while also retaining the ability to grant or decline resource consent in accordance with the</p>	

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					principles and objectives that are contained in the RMA and within the Proposed NRRP.	
<p>Rule BLR9 Introduction or planting of pest plants –prohibited activity</p> <p>The Environment Canterbury Regional Pest Plant Strategy (1998) contains provisions prohibiting the sale, propagation or planting of a range of species. The spreading of these species will adversely impact on conservation, production, recreation and aesthetic values in the region.</p>	<p>The overall effectiveness of this rule is considered to be high.</p> <p>Rules BLR9 provide a clear understanding for the plan user to establish what plant species are prohibited from being planted or introduced.</p>	<p>The efficiency of this method is considered to be high as it is supported by a range of compliance and enforcement powers under the RMA.</p>	<p>Rule BLR9 provides clarity as to what plant species are prohibited from being planted or introduced.</p> <p>Reinforces the provisions of the pest management strategy.</p>	<p>Some species that have been used in the past for flood protection works will no longer be available for that purpose.</p>	<p>The Environment Canterbury Regional Pest Plant Strategy (1998) contains provisions prohibiting the sale, propagation or planting of the majority of these species. The spreading of these species will adversely impact on conservation, production, recreation and aesthetic values in the region.</p>	BLR1