

AGENDA ITEM NO: 6	SUBJECT MATTER: REVIEW OF THE CANTERBURY REGIONAL POLICY STATEMENT
REPORT: Regional Planning Committee	DATE OF MEETING: 11 February 2009
FILE REFERENCES: RPS/2008/PREP/CONS	PORTFOLIO: Democratic PROJECT: Regional Policy Statement Review OUTPUT: A reviewed CRPS
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PURPOSE

The purpose of this report is to:

- update the Committee on the proposed Regional Policy Statement (RPS) review to date;
- highlight other policy processes that are currently underway that will impact on the content and potential delivery of the Water and Coastal Environment chapters of the proposed RPS; and
- request the committee to approve the attached draft RPS chapters; Soils, and Beds of Rivers and Lakes and their Riparian Zones, for consultation.

ATTACHMENTS

Draft chapters for:

- Soils (attachment 1); and
- Beds of Rivers and Lakes and their Riparian Zones (attachment 2)

BACKGROUND

As required under the RMA, the RPS is currently being reviewed. The review process Environment Canterbury has chosen to adopt involves significant consultation with key stakeholders.

Progress to date

To date, the following chapters have been **drafted, approved** by the Regional Planning Committee (RPC) and parked awaiting formal notification:

- Contaminated Land
- Heritage
- Air
- Energy
- Natural Hazards
- Hazardous Substances
- Waste
- Issues of Significance to Ngai Tahu

The following chapter **requires a further councillor workshop** before being approved for notification:

- Urban and Rural Development

The following chapter has been **drafted, but parked** pending the outcomes of the New Zealand Coastal Policy Statement (NZCPS) review before seeking approval from the Regional Planning Committee to consult with territorial authorities and other stakeholders:

- The Coastal Environment (*see section “Policy influences on RPS review” later in this report*)

The following draft chapters have been prepared in the same collaborative way with officers of each of the territorial authorities. Officers are **seeking approval to formally consult** on these two chapters in this report:

- Soils
- Beds of Rivers and Lakes and their Riparian Zones

The following chapters require **finalisation of issues and options papers**, drafting and consultation:

- Landscape (landscape study currently being undertaken by Boffa Miskell Ltd)
- Biodiversity
- Water (*see section “Policy influences on RPS review” later in this report*)

Work is also required and **yet to start** on the following chapters:

- Resource Management Framework
- Significant Resource Management Issues
- Integration of Resource Management Processes
- Indicators and Monitoring Strategy

THE PROPOSAL

That the Committee notes the progress to date for the review of the RPS and implications of other policy influences on its development, and approves the attached draft RPS chapters; Soils, and Beds of Rivers and Lakes and their Riparian Zones, for consultation purposes with constituent territorial councils and other interested parties.

POLICY INFLUENCES ON RPS REVIEW

It is anticipated that the RPS will be notified as a whole document in early to mid 2010. However staff would like to flag some external factors that may affect the delivery of the RPS by this time. Two chapters in particular are potentially affected by this issue.

Water chapter

There are currently two significant processes underway that affect the delivery and consultation on the Water chapter; the National Policy Statement (NPS) on Freshwater Management and the Canterbury Water Management Strategy (CWMS). The timing of the NPS is uncertain, however the CWMS should be finalised by September 2009. In evaluating the risks and options, the Water Steering Group determined that the drafting of the Water chapter needs to be fully integrated with the outcomes of the CWMS. To achieve this it was felt that drafting of the Water chapter should commence in August, and that the RPS drafting team should work closely with the CWMS group to ensure co-ordination of the policy directions.

It is proposed that this matter be brought back to Council once staff have further considered how these processes can best be aligned.

The Coastal Environment chapter

The proposed New Zealand Coastal Policy Statement (NZCPS) is also currently in the process of being finalised, with recommendations due from the Board of Inquiry to the Minister of Conservation by March 31st 2009. It is anticipated that subject to no further changes or questions of clarification, the NZCPS could be gazetted by May 2009. Officers have therefore parked the Coastal Environment chapter awaiting the outcomes of the NZCPS, as significant changes could be required to the draft chapter.

Additionally, it is noted that Phase 1 of the reforms to the Resource Management Act have just been announced. These will impact on the proposed RPS, however, until further analysis is undertaken, the extent of the impact is uncertain.

DRAFT CHAPTERS

Issues and Options discussion papers for the Soils chapter and the Beds of Lakes and Rivers and their Riparian Zones chapter were prepared in June 2008 after internal discussions with ECan staff. A meeting was held to discuss them with territorial authority staff in July 2008. TA staff who were unable to be present e-mailed comments and questions.

In August 2008 a workshop of ECan councillors discussed the issues and options report and after giving broad directions to ECan staff, agreed with the drafting of the chapters along the lines proposed.

Internal ECan staff discussions and drafting ensued and in September 2008 early draft Chapters circulated for comment to TA staff and other interested organisations. This was followed in October 2008 with consideration of comments received and redrafting. Most, if not all, of the comments and suggestions were taken on board and incorporated one way or another.

Revised draft chapters were circulated to TA staff in November 2008 and meetings held with northern TA staff on 15 December 2008 and southern TA staff on 19 January 2009. The current drafts reflect this last round of consultation with TA staff and others.

Endorsement is now sought to approve two of these chapters (excluding The Coastal Environment) for consultation.

For each chapter the key changes from the existing CRPS chapters are highlighted.

Soils chapter – key changes

- Generally more succinct policies with details and interpretations left to explanations.
- Land-use to be addressed through the Urban and Rural Development chapter.
- Contaminated Soil (land) now addressed in the new Contaminated Land chapter.
- Hazardous substance contamination of soil (land) now addressed in Chapter 17 Hazardous Substances.
- Urban and Rural Development affecting versatile soils now addressed in Chapters 12 Urban and Rural Development and 12A UDS.
- Pests affecting soils now addressed by the Chapter addressing Ecology, Biodiversity and Pests.
- Now only one issue left, soil degradation and induced erosion as a result of land use.
- Previous single objective dealing with the issue now split into two.
- More specific methods related to specific policies.

Some technical staff input is still required, updating the chapter to reflect the current Canterbury soil erosion situation.

Beds of rivers and lakes and their riparian zones chapter – key changes

- Generally more succinct issues, objectives and policies.
- More careful, targeted and precise use of the terms “beds”, “banks”, “margins” and “riparian zones”.
- More positive spin for issue 10.1 protecting values whilst providing for activities rather than “damage” from activities.
- Incorporates ECan responsibilities for specifying the objectives, policies and methods for the control of the use of land in river and lake beds to maintain indigenous biological diversity. Territorial authorities are to be similarly responsible for all land outside the beds, including the riparian zones outside of beds.
- Identification of important conservation areas now a method not a policy in its own right.
- More specific methods related to specific policies.

The monitoring provisions for this chapter are yet to be completed.

CONSISTENCY WITH EXISTING POLICY, PLANS OR LEGISLATION

The RPS review is required by the RMA, as is the consultation prior to the notification of a new RPS. Input into drafting has also been sought from the authors of the Natural Resources Regional Plan (NRRP) and planning managers or representatives from the Territorial Authorities. As outlined in the *Policy influences on the RPS review* section of this report, the review is seeking to be consistent with national and regional policies as they develop.

VIEWS OF AFFECTED AND INTERESTED PARTIES

Targeted consultation has been an integral part of this RPS review process. The consultation meetings that have taken place with Territorial Authority staff during this current consultation round have been positive and productive, with many good comments made.

FINANCIAL

The work is being undertaken within budgets providing for the RPS review.

CONCLUSIONS

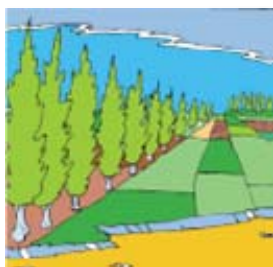
The draft chapters are generally suitable for ongoing consultation.

RECOMMENDATIONS

That the Committee note the progress to date on the Regional Policy Statement.

That the Committee note the external policy influences on the Regional Policy Statement review, recognising that this matter will be brought back to RPC once staff have further considered how these processes can best be aligned.

That the Committee approve the draft Regional Policy Statement chapters in relation to Soils, and the Beds of Rivers and Lakes and their Riparian Zones, for consultation purposes with constituent territorial councils and other interested parties, subject to any changes sought by the Committee.



7. Soils

7.1 Introduction

Scope of the Chapter

Induced soil erosion and the loss of soil qualities are the problems addressed in this chapter. The causes of these problems include vegetation removal, over-grazing, burning or cultivation, earthworks, contamination, plant and animal pests, and the development of land where this reduces the potential production from that land.

Contaminated soil is an issue that is addressed in the Contaminated Land Chapter **X** and soil contamination by hazardous substances is addressed in Chapter **17** Hazardous Substances. Similarly, the issues of land uses causing soil and sediment run off into water bodies and coastal water and adversely affecting the quality of that water are addressed by Chapter **9** Water.

Chapter **12** Urban and Rural Development addresses the issue of urban and rural development that reduces the rural primary productive base of Canterbury, including such development foreclosing the ability to utilise important rural resources such as versatile soils, or limiting or curtailing rural productive activities due to soil coverage, soil compaction, soil contamination or soil removal.

Chapter **12A** Urban Development Strategy addresses the issue of sporadic or unplanned development in and around Christchurch adversely affecting the productive potential of versatile soils and associated rural industries.

Chapter **X** Ecology, Biodiversity and Pests addresses animal and plant pest issues including the role animal pests play in reducing vegetative cover leading to increased soil erosion.

Soil as a Resource

Soil Conservation is a resource management issue of significance in Canterbury because of the region's ongoing problems of degradation of soil quality, induced soil erosion, soil contamination and the loss of versatile soils to development. Soils are natural resources of the Canterbury region that support both productive crops and natural flora and fauna. Safeguarding the life-supporting capacity of soil is a fundamental element of the sustainable management purpose of the Act.

Regional Councils have the function under the Act to control the use of land for the purpose of soil conservation. Soil conservation is defined by the Act to mean "avoiding, remedying, or mitigating soil erosion and maintaining the physical, chemical, and biological qualities of soil".

Inappropriate land management can adversely affect soil quality through, among other things, loss of vegetative cover (whether by overgrazing, burning, or vegetation clearance) exposing soil or reducing slope stability and inducing erosion. In Canterbury land degradation is usually linked to the undeveloped high country, and arises as a consequence of introduced pests and pastoral land use over the past 150 years. The most visible area of land degradation in Canterbury is the Mackenzie Basin where parts are severely degraded. At a number of places in Canterbury, there is increased vulnerability to erosion, for example, on the erosion-prone hill-slopes in parts of North Canterbury and Banks Peninsula that have been cleared of deep-rooted vegetation. In the Canterbury hill and high country, where land management burning is used to remove or suppress unwanted vegetation, there are adverse effects on soil quality through a loss of soil nutrients, exposure of soil to the weather, and the consequent possibility of soil erosion.

Overuse and inappropriate applications of fertilisers and sprays has also contaminated soils. In parts of Canterbury past applications of DDT still limit the use of some land, and dangerous residues remain from waste disposal sites and sites where timber treatment chemicals have been used. Urban development has removed the potential for primary productive use of some of the region's most versatile land. This applies to many Canterbury towns, and particularly on the periphery of Christchurch.

Territorial authorities are required to give effect to the provisions of Chapters 12 Urban and Rural Development and Chapter 12A UDS Policy 7.1 in district plans by setting out objectives, policies and methods, including district rules to maintain the potential to efficiently and effectively undertake the production of primary produce within Canterbury's rural productive areas. Territorial authorities are required to ensure inappropriate urban and rural developments do not foreclose the ability to use soil valued for primary production, including areas of versatile soil. In doing so, territorial authorities are required to define rural areas to be used for primary production, taking into account the versatility of the soils along with other natural resources of the areas.

7.2 Issues

Issue 7.1

Degradation in the quality and life-supporting capacity of soils and induced erosion as a result of land uses can limit the productive capability of the land and reduce its ability to provide for the wellbeing of the Canterbury community.

Explanation

The quality and life-supporting capacity of soil involves its structure, nutrients, soil organic matter, fertility, water-holding capacity, presence of contaminants and versatility. Land use practices that may degrade soil include: over grazing by farm animals or pests, soil compaction, settlement and other developments on versatile (Class I and Class II) soils, and soil contamination, for example from spraying of chemicals and the excessive application of fertilisers.

Safeguarding the life-supporting capacity and avoiding erosion of soil promotes the sustainable management of the soil resource and the associated ecosystems, production and values that depend on it.

Induced erosion is erosion in excess of natural rates and that can be attributed to the actions or activities of people. Factors contributing to induced soil erosion include:

- (i) Loss of vegetative cover on sloping land, particularly in hill and high country areas, by clearance of vegetation, such as by burning, cultivation, or felling of bush and trees.
- (ii) Loss of vegetative cover on sloping land, particularly in hill and high country areas, by over-grazing, whether by domestic animals, and/or animal pests, especially where drought conditions limit available grazing.
- (iii) Cultivation, especially where a fine tilth is developed and/or sloping land is tilled. Creation of a fine tilth increases the risk of wind erosion. This is of particular concern on the plains and downs, and especially in cropping areas where a high proportion of the land is cultivated each year.
- (iv) Earthworks that reduce slope stability, for example, the cutting of tracks on hill country.

Increased droughts and extreme weather (rainfall) events as a result of global climate change will place greater natural stresses on Canterbury's soil resources. These stresses will increase the importance and need for the policies in this chapter to safeguard soil quality and its life-supporting capacity and avoid induced soil erosion.

The agricultural sector will adapt to make the best use of opportunities afforded by climate change, bringing about changes in the agricultural output of the region. There may also be renewed interest in silviculture, particularly if this is subject to financial incentives to sequester carbon. There may also be a move towards biofuel from crops and organic by-products to meet government fuel targets. Changes are also likely to arise as this sector adapts to changes in water availability (either positive or negative,

depending on the changed local rainfall, local evapotranspiration, and the catchments of local rivers) these changes will impact on soils. However, the policy framework in this chapter should be able to address these changes, regardless of any land use changes.

7.3 Issue Resolution

Objective 7.1

To maintain or improve the quality of Canterbury's soils to safeguard their life-supporting capacity.

This objective will be achieved through the implementation of Policies 7.1 and 7.3, and the provisions of Chapter 17 Hazardous Substances, Chapter 12 Urban and Rural Development, Chapter 12A Urban Development Strategy and Chapter X Contaminated Land.

Explanation

The maintenance of the quality and life-supporting capacity of soils is fundamental to the sustainable management of those soils. For example, the loss of the natural mineral component of soil is effectively irreversible given its very slow rate of formation.

Soil quality includes its structure, nutrients, organic matter, fertility, water-holding capacity, presence or absence of contaminants and its versatility for high quality agricultural use. Soil quality can be improved through the addition of fertiliser and organic matter.

Objective 7.2

To prevent significant induced soil erosion.

This objective will be achieved through the implementation of Policies 7.2 and 7.3.

Explanation

Loss of soil through induced erosion reduces the life-supporting capacity of the land. It can also cause siltation and excessive nutrients in water bodies. Dust from wind erosion can also have adverse effects on production from other land and on air quality, affecting people's health and wellbeing.

Policy 7.1

Avoid significant long term adverse effects on soil quality from the use of land, and remediate significant soil degradation where it has occurred.

Methods

1. The Regional Council must give effect to Policy 7.1 by setting out objectives, policies and methods in regional plans to avoid significant long term adverse effects on soil quality from land uses and to remedy or mitigate soil degradation where it has occurred or is likely to occur.
2. The Regional Council will promote land use practices that maintain and improve soil quality by providing education, information and assistance for land users and working with research, farming and other organisations.

3. Territorial authorities must give effect to Policy 7.1 through provisions in district plans that maintain the potential to efficiently and effectively undertake the production of primary produce within Canterbury's rural productive areas by ensuring that urban and rural developments do not foreclose the ability to use soil valued for primary production, including areas of versatile soil, unless use of those areas cannot be avoided. Such provisions must ensure that structure plans shall identify landuse capability to guide appropriate locations for urban development.
4. The Regional Council in undertaking its functions under the Soil Conservation and Rivers Control Act 1941, River Improvement Acts, the Reserves Act 1971 and the Biosecurity Act 1993 will take actions to avoid significant long-term adverse effects on soil quality from land uses and to remedy or mitigate soil degradation where it has occurred or is likely to occur.
5. The Regional Council will investigate and monitor the quality of Canterbury soil and the extent of soil degradation to determine the effectiveness of its existing regional plans and other methods in avoiding significant long term adverse effects on soil quality from land uses.

Explanation

The combination of all of the elements of soil quality determines the productive capacity of soil. Significant long term effects are effects that can not be reversed within the length of one generation to the next, or about 25 years.

Soil compaction at deeper levels, such as that associated with repeated passage of heavy machinery over moist soils, is an example of an adverse effect on soil structure. Harvesting from the land, whether of crops or forestation directly, or through pastoral animals, depletes the soil of nutrients. Nutrient depleting occurs when the rate of nutrient removal is faster than the rate at which available nutrients are replenished naturally, or from the addition of fertiliser.

The loss of key soil quality factors can be difficult to rectify, and if not corrected, that degradation may continue to worsen, often resulting in land being exposed to soil erosion. Introduced animal pests, such as rabbits and wallabies, can contribute directly to land degradation by depleting the vegetative cover and reducing productive land use options. The Biosecurity Act 1993 is aimed at eradication or control of unwanted plant and animal pests, and has powers that are complementary to those under the Resource Management Act.

Soils with high versatility (Class I and II) can be lost to productive purposes through settlement and other land development. While singularly the effects of this may seem insignificant, cumulatively it is a matter of regional significance. Granting of consents on an ad hoc basis can also affect the integrity of district and regional plans, and create a precedent for similar activities to be granted. Effects on these soils along with other soil qualities and attributes that support the rural productive base should be incorporated into planning and consents for new land developments in both urban and rural areas.

Policy 7.2

Avoid significant induced soil erosion resulting from the use of land and remediate or mitigate significant soil erosion where it has occurred.

Methods

1. The Regional Council must give effect to Policy 7.2 by setting out objectives, policies and methods in regional plans to prevent land uses from causing soil erosion and to remedy or mitigate soil erosion where it has occurred.
2. The Regional Council will promote land use practices that avoid soil erosion by providing education, information and assistance for land users and working with research, farming and other organisations.

3. The Regional Council in undertaking its functions under the Soil Conservation and Rivers Control Act 1941, River Improvement Acts, the Reserves Act 1971 and the Biosecurity Act 1993 will take actions to prevent land uses from causing soil erosion and to remedy or mitigate soil erosion where it has occurred.
4. Territorial authorities must give effect to Policy 7.2 in district plans by setting out objectives, policies and methods, in accordance with the provisions of Chapter 9 Water, requiring earthworks and forestry activities to have effective sediment retention measures where there is potential for sediment runoff, and for earthworks to be designed and programmed so as to minimise the extent of exposed soil at any time.

Explanation

Induced soil erosion reduces the life-supporting capacity of the land, thereby reducing the ability of future generations to meet their needs. Even land with the poorest soil has some life-supporting capacity as long as the soil remains firmly in one place. However, even land with the best soil loses some of its life-supporting capacity if it is eroded.

Induced soil erosion can develop slowly over time as a result of land degradation. Over time plant vigour falls, and the soil becomes exposed to the elements. Induced soil erosion may come abruptly with vegetation clearance or with mechanical disturbance.

Examples of appropriate land use practices that avoid land degradation or erosion include, but are not limited to:

- (a) Use of lower erosion risk cultivation methods and timing, for example, direct drilling, not cultivating to a fine tilth.
- (b) Action to maintain or improve soil properties, for example, increasing the level of organic matter.
- (c) Planting of shelter belts to reduce wind erosion.
- (d) Use of irrigation which helps establish groundcover after cultivation, or maintain it in drought.
- (e) Managing stocking rates (taking into account background climatic and other factors, such as animal and plant pest intensity) to maintain adequate protective ground cover.
- (f) Precautions to minimise the environmental effects of crop stubble or weed burning, for example, over-sowing, topdressing, or not burning too frequently.
- (g) Preparations before undertaking earthworks to minimise the risk of short or long-term soil erosion, for example, minimising area of exposed soil during and after earthworks, provision of sediment retention techniques.
- (h) Planning for forestry to minimise soil erosion, for example, track design and location, harvest management plan, setting aside of riparian management zones.
- (i) Planting of suitable vegetation on erosion-prone hill slopes where this would help stabilise the soil.
- (j) Strategies that combine relevant elements of the above actions together to avoid or correct land degradation that could induce soil erosion.
- (k) Retirement of unstable land from productive uses.

The most important factor in preventing induced soil erosion is a healthy indigenous or introduced vegetative cover with a low percentage of bare soil. Vegetation clearance exposes the soil and increases the risk of erosion. Animal pests, such as rabbits and wallabies, can contribute directly to soil erosion by depleting the vegetative cover.

Environment Canterbury's 2007 Erosion and Sediment Control Guideline is an example of advice that assists in reducing sediment runoff from temporary land-disturbing and vegetation removal activities.

Policy 7.3

Ensure land use practices maintain or enhance soil qualities and avoid induced soil erosion. Particular focus is to be given to the desirability of maintaining vegetative cover on non-arable land.

Methods

1. The Regional Council must give effect to Policy 7.3 by setting out objectives, policies and methods in regional plans:
 - (a) to avoid significant long term adverse effects on soil quality from land uses and to remedy soil degradation where it has occurred or is likely to occur; and
 - (b) to prevent land uses from causing soil erosion; and to remedy or mitigate soil erosion where it has occurred.
2. The Regional Council will promote land use practices that maintain and improve soil quality and avoid soil erosion by providing education, information and assistance for land users and working with research, farming, construction and earthmoving industries and other commercial and non-profit organisations. Attention is to be given to the need to maintain vegetative cover where soil is vulnerable to erosion.
3. Territorial authorities must give effect to Policy 7.3 through provisions in district plans that maintain the potential to efficiently and effectively undertake the production of primary produce within Canterbury's rural productive areas by ensuring that urban and rural developments do not foreclose the ability to use soil valued for primary production, including areas of versatile soil, unless use of those areas cannot be avoided.

Explanation

Examples of appropriate land use practices that avoid land degradation or erosion are described in the explanation for Policy 7.2 above.

The most important factor in preventing induced soil erosion is a healthy indigenous or introduced vegetative cover with a low percentage of bare soil. Vegetation clearance exposes the soil and increases the risk of erosion. Animal pests, such as rabbits and wallabies, can contribute directly to soil erosion by depleting the vegetative cover.

Environment Canterbury's 2007 Erosion and Sediment Control Guideline is an example of advice that assists in reducing sediment runoff from temporary land-disturbing and vegetation removal activities.

Soils with high versatility (Class I and II) can be lost to productive purposes through settlement and other land development. Effects on these soils along with other soil qualities and attributes that support the rural productive base should be incorporated into planning and consents for new land developments in both urban and rural areas.

7.4 Environmental Results Anticipated

1. The maintenance and improvement of soil quality.
2. Reduced soil erosion.

7.5 Monitoring Effectiveness

1. A checklist will be prepared and monitored 3 yearly as part of the Environment Canterbury LTCCP process to confirm that appropriate and comprehensive provisions and/or procedures are in place to manage soil quality and soil erosion relating to all of the following functions:
 - (a) district planning by all Canterbury territorial authorities;
 - (b) Environment Canterbury regional planning functions
 - (c) Environment Canterbury biosecurity functions;
 - (d) Environment Canterbury biodiversity functions;
 - (e) Environment Canterbury river engineering functions;
 - (f) Environment Canterbury reserves management functions; and
 - (g) Environment Canterbury resource care functions.

Gaps will be identified and measures taken or advocated to remedy any omissions.

2. Environment Canterbury's Environmental Quality and Resource Care sections will report annually, as part of the Environment Canterbury annual planning process, on actions to promote land use practices that maintain and improve soil quality and avoid soil erosion by providing education, information and assistance for land users and working with research, farming and other organisations.

The sections will report on trends, the reasons for any identified changes or serious problems, and the recommended solutions to those problems.

3. Environment Canterbury's Environmental Quality section will report 3 yearly as part of the Environment Canterbury LTCCP process on investigation and monitoring of the quality of Canterbury soil and the extent of soil degradation and soil erosion.

Soil quality reporting will include loss of areas of versatile soils to development, and measures of biological, chemical and physical soil quality from areas at risk.

Soil erosion reporting will include estimates of the average annual rate of soil loss on the Canterbury Plains from wind erosion. Measurement of arable topsoil loss will be from soil samples collected from a range of sites across the Plains and the Caesium content analysed. Areas at risk from induced soil erosion include coastal and inland dunes, loess mantled hill slopes and soft rock hill country, the Kaikoura coastal zone, arable soils of the plains and downs, slopes greater than 25 degrees, areas above 900 metres in altitude and stream banks.

The section will report on trends, the reasons for any identified changes or serious problems, and the recommended solutions to those problems.



10. Beds of Rivers and Lakes and their Riparian Zones

10.1 Introduction

Scope of the Chapter

This chapter addresses issues relating to the beds of rivers and lakes and their associated riparian zones, banks and margins.

In relation to a river, the bed is the space of land which the waters of the river cover at its fullest flow without overtopping its banks. In the case of a lake, it is the space of land which the waters of the lake cover at its highest level without exceeding its margin. The riparian zone is an area where there is direct interaction between terrestrial and fresh water ecosystems and it extends from the waters edge across the bank of a river and the margins of a lake. Appendix 1 provides the definitions of the beds of rivers and lakes, as determined by the Act, and the definition of a riparian zone.

Chapter 9 Water addresses discharges of contaminants and water to land and to water, and with land use affecting water quality and quantity. The Water chapter and Chapter X Ecology, Biodiversity and Pests also address wetland management and protection. This policy statement does not address issues relating to activities on the surface of rivers and lakes such as boating.

Chapter 16 Natural Hazards addresses the effects of natural hazards, including flood and the effects of development on the impacts of such natural hazards. It assigns responsibilities to territorial authorities for the control of the use of land to avoid or mitigate natural hazards.

Regional councils have specific functions under the Act to establish, implement and review objectives, policies and methods to maintain indigenous biological diversity; to integrate infrastructure with land use; to control the introduction or planting of vegetation in the beds of water bodies; and to control the use of land to avoid or mitigate natural hazards. Territorial authorities also have the functions under the Act for the control of the effects of the use, development or protection of land to avoid or mitigate natural hazards and to maintain indigenous biological diversity.

Both regional and territorial responsibilities for objectives, policies and methods to maintain indigenous biological diversity are subject to an allocation of responsibilities set out in a regional policy statement. The Act requires a regional policy statement to state the local authority responsible in the whole or any part of the region for specifying the objectives, policies, and methods for the control of the use of land to maintain indigenous biological diversity. Chapter X Ecology, Biodiversity and Pests specifies that in river and lake beds these responsibilities are to be undertaken by the Canterbury Regional Council. The Ecology, Biodiversity and Pests chapter also assigns to territorial authorities the indigenous biological diversity responsibilities in other parts of the region, including the riparian zones of rivers and lakes outside of the beds.

Values of river and lake beds and their associated riparian areas

River and lake beds and their associated riparian areas are important natural features in Canterbury. Canterbury is characterised by its large braided rivers. The many large braided rivers and their beds are especially distinctive and important to natural and geological processes in the Canterbury environment. Foothill and other streams and rivers are also important at a more local level. Canterbury is characterised by many large and smaller lakes including the many large lakes created by hydroelectric dams. Lake and river beds and their riparian zones are vital elements of the Canterbury landscape and important habitats for indigenous flora and fauna. River and lake beds and their riparian areas provide birds and fish with essential pathways between the coast and inland habitats.

The riparian zone is an important area for the management of water quality and ecological resources. It provides a buffer for effects between land and river or lake processes. Riparian vegetation, both exotic and indigenous, is important for mitigating the effects of non-point source discharges, moderating in-stream water temperature, maintaining the stability of shorelines and stream banks, providing a habitat for wildlife, and its contribution to the natural character of rivers and lakes.

River and lake beds, including their associated banks and margins, are important areas for both commercial and recreational use. River and lake beds and their banks and margins are the location of important infrastructure such as bridges, fords, pylons, pipelines and other crossings, water intakes, conduits, water races, canals for the conveyance, storage and discharge of water, dams, including major electricity generation facilities, river gauging towers and flood protection works such as stop banks, groynes, live tree protection and protective rock banks. Much of this infrastructure and the resources of river and lake beds are important for the social and economic well being of people and communities, for example by providing for electricity generation, providing protection from floods, providing for recreational opportunities, and providing for water storage. Gravel and rocks from river beds are a major source of material for the building and road construction industries.

There is a need to enable river and lake bed resources to be used for the benefit of the community, but some activities in river and lake beds and their riparian zones can adversely affect the natural, physical, cultural, amenity, and historic heritage values associated with those areas. Such activities can also adversely affect the integrity and performance of structures located in, on, under or over those beds, can affect flood protection works in or on the bank or margin of the bed; can exacerbate the adverse effects of floods, and can adversely affect the flood carrying capacity of a river. However, chapter 16 Natural Hazards more specifically addresses flood hazards and flood avoidance and mitigation measures.

Public access to and along river and lake beds is desirable for enabling and maintaining access to the natural and physical resources of the beds. However, such access can have adverse effects on the natural, cultural, amenity, and historic heritage values of the beds, and on surrounding landowners/occupiers and owners of infrastructure.

Increased extreme weather (rainfall) events as a result of global climate change will place greater natural stresses on Canterbury's rivers and lakes and the associated flood protection measures in the beds. These stresses will increase the importance and need for the policies in this chapter to deal with and provide for floods.

10.2 Issues

Issue 10.1

Protecting or enhancing the natural, physical, cultural, amenity, and historic heritage values of the beds of rivers and lakes and their riparian zones, whilst providing for activities within those beds and riparian zones.

Explanation

River and lake beds are extensively and properly used for recreation, resource management and commercial purposes. However, a number of activities that occur within the beds of rivers and lakes and their riparian zones can adversely affect the values of those beds and riparian zones if not appropriately managed. Section 13 of the Act restricts many activities within the bed unless a regional plan provides rules to permit such activities, or the activity is allowed through granting of a resource consent.

Recreation, resource management and commercial activities in the beds and riparian zones include:

- Drainage and diversion works,
- Vegetation planting, removal or modification,
- Damming and diversion structures,
- Works associated with lake and river lagoon level management,

- Use of construction and mining machinery,
- Making of roads and tracks,
- Dumping of waste including weeds,
- Disturbance and destruction of habitats by people and their vehicles, machinery, watercraft and animals (including pets and livestock),
- Pest control,
- Hunting and fishing,
- Fisheries management,
- Extraction, deposition and disturbances of rock, gravel, sand and other bed material,
- Construction of river protection works and other structures,
- Planting of vegetation, and
- Application of chemicals.

The natural and physical resources and values associated with rivers and lake beds and their riparian zones that are at risk include:

- The physical and geological values of river and lake beds,
- Natural character of the beds,
- Landscapes,
- Geomorphologic features of braided and other rivers,
- Habitats of indigenous flora and fauna,
- Habitats of trout and salmon,
- Aquatic ecosystems,
- Mahinga kai, wahi tapu, nohoanga and wahi taonga,
- The ability of tangata whenua to exercise their traditional practices,
- Physical infrastructure, including flood protection structures, and bridges and other crossings,
- Heritage places and items such as historic bridges and other historic structures,
- Vegetation, including vegetation for flood protection, and
- Amenity values, including recreation values and the tranquillity of an area.

Issue 10.2

Rivers and lakes provide flood channels and storage of flood waters, but activities within the beds of rivers and lakes and their banks or margins can reduce the flood-carrying capacity of those rivers and lakes and can exacerbate the adverse effect of floods.

Explanation

Removal of both exotic and indigenous vegetation and removal of bed material such as earth, rocks, or gravel from river or lake beds can hasten erosion of banks and margins causing flooding. Vegetation planting can unduly confine a river. The deposition of bed material, earthworks, building, placing, or removing structures in the beds, and diversions and releases of water can similarly exacerbate floods effects if undertaken inappropriately or in inappropriate places. Similar activities close to banks or in the margins adjacent to the bed can also create these effects.

Issue 10.3

The need for essential structures in, on, under or over the beds of rivers and lakes and their banks or margins to be protected from activities within those beds of rivers and lakes and their banks or margins that can adversely affect their stability, performance or full operation.

Explanation

Essential structures are structures associated with:

- road and rail transport;
- water supply;
- telecommunications;

- energy production, supply, distribution or transmission;
- flood protection;
- water containment or diversion;
- water level and flow measurement; and
- network utilities.

Essential structures include bridges, fords, pylons, pipelines and other crossings, water intakes, conduits, water races and canals for the conveyance, storage and discharge of water, dams, river gauging towers and flood protection works such as stop banks, groynes, and protective rock banks.

Activities that can adversely affect the stability and performance of essential structures include:

- diversion of river flows or the release of water;
- construction of other structures;
- river flood protection works;
- vegetation planting or removal; and
- excavation, deposition or removal of bed material.

Issue 10.4

Maintaining and improving public access to and along river and lake beds, whilst managing the adverse effects of that access on the natural, physical, cultural, amenity, and historic heritage values of those beds.

Explanation

There is a need to provide appropriate public access to and along river and lake beds in a manner that does not adversely affect the values of those beds.

In general, there is a public expectation that there will be unimpeded access to and along the region's river and lake beds. However, certain types of access and unconditional access can compromise other values for river and lake beds and essential structures, and only appropriate access should be provided for or enhanced. For example vehicles at certain times and outside of established tracks can damage bird nesting sites.

Tangata whenua values, such as those associated with wāhi tapu or nohoanga, may also require special protection in places from inappropriate access by the public who may not appreciate the need to follow tikanga māori.

Access across private land will not always be available or appropriate for commercial or privacy reasons. The type of access and the time or dates of what is appropriate access may also vary. For example vehicles access at lambing time or when the ground is saturated with water may adversely affect primary production. Public access where farm or construction machinery is operating may give rise to safety concerns.

Land tenure and ownership are factors that need to be considered. Where there are legal roads or existing public access rights, there is public expectation that access should continued to be provided for or enhanced.

10.3 Issue Resolution

Objective 10.1

To protect and enhance the natural, physical, cultural, amenity, and historic heritage values of river and lake beds and their riparian zones.

This objective will be achieved through the implementation of policies 10.1 and 10.2 and the provisions of Chapter 9 Water and Chapter X Ecology, Biodiversity and Pests. Policies 10.4 and 10.5 also provide for natural, physical, cultural, amenity and historic heritage values to be protected in dealing with maintaining flood carrying capacity and providing access.

Explanation

Canterbury's river and lake beds and riparian zones are important resources for the enablement of social and economic wellbeing of the community, and are also important natural resources providing important habitats for indigenous flora and fauna and for trout and salmon. These and other natural, physical, cultural, amenity, and historic heritage values of the beds and riparian zones should be appropriately enhanced in accordance with purpose and principles of the Act, and they also need protection from inappropriate use and development.

Maintenance and enhancement of the quality of the environment is a matter that particular regard must be had to under the Act. The restrictions on the use of river and lake beds in the Act mean that there is a need to enable the appropriate use and development of river and lake beds while protecting their natural, physical, cultural, amenity and historic heritage values.

Objective 10.2

To protect the flood-carrying capacity of rivers from the adverse effects of activities in the beds and from the effects of accumulation of bed material and vegetation within the beds.

This objective will be achieved through the implementation of policies 10.3 and 10.4. Chapter 16 Natural Hazards covers flood hazards and flood avoidance and mitigation measures.

Explanation

The flood carrying capacity of Canterbury Rivers must be maintained to protect land and settlement in Canterbury. Both human and natural occurrences can act to reduce the flood carrying capacity of a river. Vegetation planting or dumping and the associated spread of pest plants and other uncontrolled vegetation within the beds of rivers can impede flood flows. Deposition or removal of bed material, earthworks, and building or removing structures in the bed can divert flood flows and exacerbate flood effects if undertaken inappropriately or in inappropriate places.

Objective 10.3

To protect the stability, performance and operation of essential structures from activities in river and lake beds and their banks or margins.

This objective will be achieved through the implementation of Policies 10.3 and 10.4. Policy 10.5 also provides for essential structures to be protected in dealing with provision of access to the beds.

Explanation

Many structures in, on, under or over river beds are essential for the wellbeing of the community and their failure or significant impairment should be avoided. Activities such as removal or disturbance of bed material or vegetation, if undertaken in inappropriate places, can interfere with the operation of essential structures or the ability to withstand floods.

Essential structures are those identified above under Issue 10.3. They include bridges, fords, pylons, pipelines and other crossings, water intakes, conduits, water races and canals for the conveyance, storage and discharge of water, and dams.

The National Policy Statement on Electricity Transmission was issued on 13 March 2008. It requires, amongst other matters, that in making decisions under the Act the effective operation, maintenance, upgrading and development of the electricity transmission network be recognised and provided for. Such networks regularly cross both river and lake beds.

Objective 10.4

To maintain and enhance public access to and along rivers and lakes where:

- **It is safe to do so; and**
- **It will not cause significant adverse effects on the natural, physical, amenity, cultural and historic heritage values of those rivers and lakes; and**
- **It is in accordance with Tikanga Māori; and**
- **It will not compromise the stability, performance or operation of essential structures; and**
- **It will not create significant conflicts with the rights and lawful activities of owners/occupiers of river or lake bed and adjacent land, or of the owners/operators of infrastructure in, on, under or over the bed.**

This objective will be achieved through the implementation of Policy 10.6. Policies 10.1 and 10.7 provide for protection of natural, physical, amenity, cultural and historic heritage values from inappropriate access to and along rivers and lakes.

Explanation

Improved public access is desirable, but not at the cost of significant adverse effects on natural, amenity, cultural and historic heritage values or the legitimate rights of river or lake bed land owners or occupiers of land or infrastructure. Improved access to and along rivers and lakes is desirable as recreation opportunities in these areas can be enhanced. It is however recognised that unfettered access to the margins and beds of lakes and rivers can cause conflicts with other values, (including physical resources and infrastructure), and will often be inappropriate.

It is a matter of national importance under the Act to recognise and provide for the maintenance and enhancement of public access to and along lakes and rivers.

Policy 10.1

To manage activities in river and lake beds and their riparian zones to avoid, remedy or mitigate adverse effects on the natural, physical, amenity, cultural and historic heritage values of those beds and riparian zones.

Methods

1. The Regional Council will undertake investigations to identify areas within the beds of rivers and lakes and their riparian zones where there are significant natural, physical, amenity, cultural or historic heritage values that need to be protected from inappropriate use and development of those river or lake beds and their riparian zones. Iwi Management plans will be used to identify significant Ngāi Tahu cultural values, but will not be the only means of identifying such values.
2. The Regional Council must give effect to Policy 10.1 by setting out objectives, policies and methods in regional plans to enable and to control the use of land in river and lake beds and the entry to and passage along those beds, for the purpose of maintaining the biological diversity of those beds.
3. The Regional Council in undertaking its functions under the Soil Conservation and Rivers Control Act 1941, River Improvement Acts, the Reserves Act 1971 and the Biosecurity Act 1993 in river and lake beds and their riparian zones will avoid significant adverse effects on the natural, physical, amenity, cultural and historic heritage values of those beds and their riparian zones, unless such effects cannot be avoided and are necessary for the prevention of damage to life or property by floods.
4. The Regional Council will be guided by the goals, principles and priorities of the 2008 Canterbury Biodiversity Strategy in the management of activities in river and lake beds and their riparian zones and associated measures to maintain indigenous biological diversity in river and lake beds and their riparian zones.

5. The Regional Council will recognise and provide for the integrated nature of whole catchments in managing and enabling activities in river and lake beds and their riparian zones, and in measures to avoid, remedy or mitigate adverse effects on natural, physical, amenity, cultural or historic heritage values in river and lake beds and their riparian zones.
6. The Regional Council will advocate and promote the appropriate establishment of: reserves, covenants, heritage orders, bylaws and management agreements that will avoid, remedy or mitigate adverse effects on the natural, physical, amenity, cultural and historic heritage values in the beds and riparian zones of rivers and lakes, and in particular the areas identified in Method 1 above.
7. Territorial authorities must give effect to Policy 10.1 in district plans by setting out objectives, policies and methods to avoid, remedy or mitigate adverse effects on the natural, physical, amenity, cultural and historic heritage values of the riparian zones of rivers and lakes outside of their beds.

Explanation

The beds and riparian zones of rivers and lakes are important habitats for indigenous flora and fauna and provide birds and other wildlife with corridors for movement. The riparian zone provides a buffer for effects between land and river or lake processes. Riparian vegetation can be important for mitigating the effects of non-point source discharges, maintaining the stability of shorelines and stream banks, wildlife ecosystems and the natural character of rivers and lakes and their riparian zones.

Identification of areas within the beds of rivers and lakes and their riparian zones where there are significant natural, physical, amenity, cultural or historic heritage values that can and should be protected from land use activities will enable the Regional Council, territorial authorities and other bodies to prioritise their work programmes that protect, maintain and enhance these values.

There are a number of activities in, on, under or over beds of rivers or lakes that in order to take place need to be authorised by either regional rules or resource consents. These relate to structures, bed disturbance, planting of vegetation, deposition of material, reclamation and drainage.

Regional rules can also control:

- Entry to or passage across the bed of any river or lake;
- The disturbance, removal, damage or destruction of any plant or part of any plant (whether exotic or indigenous) in, on, or under the bed of any river or lake; and
- The disturbance, removal, damage or destruction of the habitats of any such plants or of animals in, on, or under the bed of any river or lake.

Activities may need to be controlled or managed to avoid, remedy or mitigate adverse effects on natural, physical, amenity, cultural or historic heritage values. The policy is to ensure that such authorisations and management practices take into account adverse effects on such values including those of areas of high natural, physical, amenity, cultural or historic heritage significance.

Plant and animal pests in river and lake beds and their riparian zones also can have adverse effects of the values of those beds and riparian zones, but plant and animal pests are dealt with under the Biosecurity Act 1993 in terms of their eradication or control for the purposes of maintaining indigenous biological diversity or improving land productivity.

The Biodiversity Strategy for the Canterbury region was adopted by Environment Canterbury, most Canterbury territorial authorities and a number of other organisations in February 2008. Its purpose is to provide strategic guidance and a common focus for policy and decision making and other initiatives relating to biodiversity management in the Canterbury Region for all of the regional stakeholders who have adopted the strategy.

Integrated catchment management is a systematic effort to manage and understand a river catchment through interactive interpretation and analysis, and management of the linkage between ecosystems, resources and people. It involves not only a planning and policy framework, but the development of monitoring, reporting, geographical information system analysis, information databases, area management and succession tools for natural resource management.

Integrated catchment management corresponds with the Ngāi Tahu concept of Ki Uta Ki Tai, (meaning “from the mountains to the sea”). This is the Ngāi Tahu way of understanding the natural environment, including how it functions, how people relate to it and how it can be looked after appropriately. Integrated catchment management also involves partnership with territorial authorities, particularly in riparian riparian zones where district councils have important roles in controlling the effects of land use and controlling access.

Policy 10.2

To promote, and where appropriate require, the enhancement of areas of river and lake beds and their riparian zones that have significant natural, physical, amenity, cultural or historic heritage values where:

- (a) those areas exist in a degraded state and enhancement will achieve long-term improvement in those values; or**
- (b) those areas have important ecological values and enhancement will assist in the establishment or re-establishment of indigenous biological diversity, particularly for ecosystems that are threatened or unrepresented in protected areas; or**
- (c) enhancement will improve or establish connections between habitats and create corridors for indigenous biological species and their movement between areas; or**
- (d) riparian zones create a buffer for activities and /or provide opportunities to create habitat corridors for plants and animals.**

Methods

1. The Regional Council will undertake investigations to identify areas within the beds of rivers and lakes and their riparian zones where there are significant natural, physical, amenity, cultural or historic heritage values that need to be protected from inappropriate use and development of those river or lake beds and their riparian zones. Iwi Management plans will be used to identify significant Ngāi Tahu cultural values, but will not be the only means of identifying such values.
2. The Regional Council will be guided by the goals, principles and priorities of the 2008 Canterbury Biodiversity Strategy in the management of activities in river and lake beds and their riparian zones and associated measures to maintain indigenous biological diversity in river and lake beds and their riparian zones.
3. The Regional Council will recognise and provide for the integrated nature of whole catchments in managing and enabling activities in river and lake beds and their riparian zones, and measures to avoid, remedy or mitigate adverse effects on natural, physical, amenity, cultural or historic heritage values in river and lake beds and their riparian zones.
4. The Regional Council will advocate and promote the establishment of reserves, covenants, heritage orders, district plan provisions and management agreements that will enhance the natural, physical, amenity, cultural or historic heritage values in areas of river and lake bed and their riparian zones. This will include the management of its own reserves and leased land and the undertaking of its functions under the Soil Conservation and Rivers Control Act 1941, River Improvement Acts, the Reserves Act 1971 and the Biosecurity Act 1993 in river and lake beds.

5. The Regional Council will advocate and promote the establishment and maintenance of riparian vegetation, and indigenous vegetation in particular, along the riparian zones of rivers and lakes to reduce the adverse effects of land use on water quality and to protect and enhance the natural, physical, amenity, cultural and historic heritage values of the beds and riparian zones of rivers and lakes.
6. Territorial authorities must give effect to Policy 10.2 through provisions in their district plans to manage riparian zones. In particular, these riparian zones should be a priority for enhancement or environmental mitigation where development, subdivision or changes in use occur.

Explanation

Identification of areas within the beds of rivers and lakes and their riparian zones where there are significant natural, physical, amenity, cultural or historic heritage values that can and should be protected from land use activities will enable the Regional Council, territorial authorities and other bodies to prioritise their work programmes that protect, maintain and enhance these values.

Enhancement of amenity values and the quality of the environment are matters that the Act requires the Regional Council to give particular regard to. Enhancement of areas of river and lake beds that have significant natural values can restore the balance of the natural ecosystem. Minimum levels of natural ecosystems may be needed for long term sustainability, particularly if threshold levels have been breached and increasing rates of loss of natural values cannot be prevented other than through enhancement.

The social, environmental and cultural wellbeing of the Canterbury community can be improved through the enhancement of areas of river and lake beds that have significant natural, physical, amenity, cultural or historic heritage values. Regulation which establishes minimum standards is by itself insufficient to enhance these values and non-regulatory methods are also necessary.

Policy 10.3

To manage activities in river and lake beds and their banks or margins to avoid or mitigate adverse effects on:

- (a) the free passage of floodwaters within river beds;**
- (b) vegetation and structures that control flood flows or protect river banks or lake margins from erosion; and**
- (c) the stability, performance or operation of essential structures that are located in, on, under or over a river or lake bed.**

Methods

1. The Regional Council must give effect to Policy 10.3 by setting out objectives, policies and methods in regional plans to control the use of land in river and lake beds and their banks or margins for the purpose of the avoidance or mitigation of flood hazards. This will include protecting the free passage of floodwaters within river beds, protecting vegetation and structures that control flood flows or stop river banks or lake margins from eroding, and protecting the stability, performance and operation of essential structures that are in, on, under or over a river or lake. Such provisions will ensure that new structures in the beds, including new essential structures, do not unnecessarily impede flood flows.
2. The Regional Council in undertaking its functions under the Soil Conservation and Rivers Control Act 1941, River Improvement Acts, the Reserves Act 1971 and the Biosecurity Act 1993 in river and lake beds and their margins will take actions to avoid or mitigate adverse effects on the free passage of floodwaters or on vegetation or structures that control flood flows or erosion and ensure that it will not have significant adverse effects on the stability, performance or operation of essential structures in, on, under or over the beds of lakes and rivers.

3. Territorial authorities must give effect to Policy 10.3 in district plans by setting out objectives, policies and methods to control of the use of land outside of river and lake beds to avoid or mitigate flood hazards and to allow access for and implementation of flood protection measures undertaken by Environment Canterbury. In doing so territorial authorities should protect vegetation and structures in the margins of rivers and lakes that control flood flows or erosion of banks; and protect essential structures that are in, on, under or over a river or lake bed from activities in the margins of those lakes and rivers that adversely affect their stability, performance or operation.

Explanation

Activities on the banks or margins of rivers and lakes can adversely affect the integrity and functioning of structures and flood protection works and vegetation in and adjacent to the bed and can exacerbate the adverse effect of floods. Such activities include the building or placement of essential and other structures such as inappropriately located water storage ponds.

Essential structures are those identified above under Issue 10.3. They include bridges, dams, weirs, fords, pylons, pipelines and other crossings, water intakes, conduits, water races and canals for the conveyance, storage and discharge of water, and flood protection structures.

The policy and methods are also needed to avoid flood damage. However, it should be noted that some activities such as dams and weirs and other structures may have adverse effects on flood flows but are necessary for the overall economic well being of the community. Such benefits may compensate for those necessary adverse effects, provided appropriate mitigation measures are undertaken, (such as the use of flood control gates).

In formulating provisions in regional and district plans, particular regard will be had to the effects of global climate change on the level and frequency of floods. The Natural Hazards Chapter **16** of this policy statement addresses natural hazards and protecting and managing activities in flood plains, including the beds and the margins of rivers and lakes. It assigns responsibilities to territorial authorities for the control of the use of land to avoid or mitigate natural hazards.

There are activities in river and lake beds that require authorisation through regional rules or resource consents. The policy is to ensure that such authorisations can occur, for example for flood protection measures, but that they take into account and avoid adverse effects on flooding and on essential structures in or crossing the beds of lakes and rivers.

Policy 10.4

To promote the removal of vegetation and bed material from river beds where it adversely affects the flood carrying capacity of the rivers; provided its removal does not significantly adversely affect the natural, physical, amenity, cultural or historic heritage values of the beds or the stability, performance or operation of essential structures.

Methods

1. The Regional Council will undertake investigations to identify areas within the beds of rivers where there are significant natural, physical, amenity, cultural or historic heritage values that need to be protected from the removal of vegetation and bed material from river beds.
2. The Regional Council must give effect to Policy 10.4 by setting out objectives, policies and methods in regional plans that provide for the appropriate removal of vegetation and bed material from river beds for the purpose of maintaining the flood carrying capacity of the rivers when controlling the use of land in those beds.
3. The Regional Council will advocate, promote and provide information about the removal of bed vegetation and bed material where it will assist in maintaining floodways in river beds. This will include the removal of natural resources such as gravel where its build up can increase flood risks.

4. The Regional Council in undertaking its functions under the Soil Conservation and Rivers Control Act 1941, River Improvement Acts, the Reserves Act 1971 and the Biosecurity Act 1993 will ensure that bed vegetation and bed materials are removed where it will assist in maintaining floodways without significantly adversely affecting the natural, amenity, cultural or historic heritage values of the beds or the stability, performance or operation of essential structures, unless such effects cannot be avoided and are necessary for the prevention of damage to life or property by floods.

Explanation

The policy and methods are needed to avoid flood damage. However, some removal of vegetation and bed material from river beds can adversely affect the values of the beds or the stability, performance or operation of essential structures.

Activities such as construction and use of dams, weirs and other structures may have both positive and adverse effects on flood flows, but are necessary in any case for the economic well being of the community. Such community benefits may compensate for any necessary adverse effects, provided appropriate mitigation measures are undertaken, (such as the use of flood control gates).

Policy 10.5

To promote the maintenance and enhancement of public access to and along the beds of rivers and lakes subject to:

- (a) **protecting public safety and infrastructure; and**
- (b) **avoiding significant adverse effects on natural, physical, amenity, cultural and historic heritage values of the beds; and**
- (c) **ensuring Tikanga Māori is observed; and**
- (d) **protecting the stability, performance and operation of structures in, on, under or over the beds; and**
- (e) **ensuring the integrity of flood protection structures and vegetation is maintained; and**
- (f) **avoiding significant conflicts with the rights and lawful activities of owners/occupiers of river or lake bed and adjacent land, or of the owners/operators of infrastructure in, on, under or over the bed.**

Methods

1. The Regional Council must give effect to Policy 10.5 by setting out objectives, policies and methods in regional plans to control the entry to or passage along river and lake beds and their banks or margins for the purpose of avoiding significant adverse effects on the maintenance of biological diversity from vehicle or other access to or along those beds.
2. The Regional Council will advocate and promote the appropriate establishment of reserves, covenants, heritage orders, district plan provisions, bylaws and management agreements that will maintain and enhance and where appropriate control public access to and along the beds of rivers and lakes and their banks or margins in accordance with Policy 10.5. This will include the management of its own reserves and leased land; undertaking activities and functions under the Soil Conservation and Rivers Control Act 1941, River Improvement Acts, the Reserves Act 1971 and the Biosecurity Act 1993 and working with the New Zealand Walking Access Commission.
3. The Regional Council will advocate and promote actions by territorial authorities and land occupiers or owners to provide appropriate access to river and lake beds and their banks or margins, and where appropriate to control or prevent such access, through provisions in district plans, reserves, covenants, heritage orders, bylaws and through management agreements, or construction and maintenance of physical barriers or other measures where it is necessary for:
 - (a) protecting public safety and infrastructure; and

- (b) avoiding significant adverse effects on natural, physical, amenity, cultural and historic heritage values of the beds; and
- (c) ensuring Tikanga Māori is observed; and
- (d) protecting the stability, performance and operation of structures in, on, under or over the beds; and
- (e) ensuring the integrity of flood protection structures and vegetation is maintained; and
- (f) avoiding significant conflicts with the rights and lawful activities of owners/occupiers of river or lake bed and adjacent land, or of the owners/operators of infrastructure in, on, under or over the bed.

Explanation

Better access to and along river and lake beds is favoured but not at a significant cost to other values. The type and timing of access and passage along the beds may also be controlled pursuant to Policy 10.2. It is a matter of national importance under the Act to recognise and provide for the maintenance and enhancement of public access to and along lakes and rivers.

Public foot access to and along river and lake beds is usually a benign activity, but vehicle access can often lead to problems through the vehicle use itself and access for other purposes such as dumping or burning rubbish. Territorial authorities have an important role in controlling such access.

The Government has established the New Zealand Walking Access Commission to lead and coordinate the provision of public access to the outdoors especially around the coastal lakes and along rivers. The Commission's responsibility includes the provision of information about the location of existing public access, a code of responsible conduct and facilitation and funding of negotiation for new public access across private land. It will be necessary for the Regional Council to work with the Commission.

The Walking Access Act 2008 provides for "public land" to be made a "walkway". Where the land concerned is or includes an unformed legal road, the New Zealand Walking Access Commission must consult the public on the proposal and provide for the landholders with legal frontage on, or direct access to, the unformed legal road to retain their existing right to use the unformed legal road. The legislation provides that if the Commission considers that any private land should be made available for use as a walkway, it may negotiate with the landholder to acquire an easement or lease over the land for its use as a walkway. Restrictions on the use of a walkway will apply, (e.g. no vehicles, dogs, horses, firearms, structures).

10.4 Environmental Results Anticipated

1. Activities within the beds of rivers and lakes and their riparian zones or access to or along the beds will have no significant adverse effects on:
 - (a) the natural, physical, cultural, amenity, or historic heritage values of those beds and riparian zones; or
 - (b) the flood-carrying capacity of rivers and lakes; or
 - (c) the stability, performance or operation of essential structures in, on, under or over beds.
2. Areas of river and lake beds and their riparian zones with degraded natural, physical, amenity, cultural or historic heritage values will be enhanced.

10.5 Monitoring Effectiveness

1. A checklist will be prepared and monitored 3 yearly as part of the Environment Canterbury LTCCP process to confirm that appropriate and comprehensive provisions and/or procedures are in place to manage river and lake bed and riparian zone activities relating to all of the following functions:

- (a) District planning by all Canterbury territorial authorities;
- (b) Environment Canterbury regional planning functions
- (c) Environment Canterbury biosecurity functions;
- (d) Environment Canterbury biodiversity functions;
- (e) Environment Canterbury river engineering functions;
- (f) Environment Canterbury reserves management functions; and
- (g) Environment Canterbury resource care functions.

Gaps will be identified and measures taken or advocated to remedy any omissions.

2. Environment Canterbury rivers engineering section will report annually, as part of the Environment Canterbury annual planning process, on weed coverage of river beds and on activities in beds and riparian zones and access to beds that have caused adverse effects on bed values including effects on structures and on flooding and flood carrying capacity. The section will report on trends, the reasons for any identified changes or serious problems, and the recommended solutions to those problems.
3. Environment Canterbury resource care section will report annually, as part of the Environment Canterbury annual planning process, on Environment Canterbury's own and subsidised river and lake bed enhancement projects (including access enhancement or control projects) and of any other such Canterbury projects sponsored through other organisations it is aware of.

Changes to Appendix 1 Definition of Terms

Add a definition fo “Nohoanga”:

Nohoanga meaning a place to sit, refers to traditional areas used by Ngāi Tahu in pursuit of food and other natural resources. This traditional concept has been given contemporary effect as a result of the settlement of the Ngāi Tahu Claim. Nohoanga are areas of lakeshore or riverbank that are to be used to facilitate the gathering natural resources in a modern context. The sites are approximately one hectare in size and allow Ngāi Tahu Whānui (tribal members) temporary, but exclusive, rights to occupy the sites.

Change the definition of “Riparian zone” to:

Riparian zone of a river or lake means the areas of land within their beds and adjacent to the beds where direct interaction occurs between aquatic and terrestrial ecosystems. The riparian zone includes the banks of a river, the margin of a lake and the relevant parts of any wetlands or islands contained within their beds. Riparian zones typically contain vegetated corridors or surrounds adjacent to and within the beds.

Delete the definition of “Margin”