MEETING OF THE REGIONAL PLANNING COMMITTEE

TO THE CHAIRPERSON AND MEMBERS OF THE COMMITTEE

MEMBERSHIP OF THE COMMITTEE

Cr R M Kirk (Chairperson)

Cr T K Burke
Cr J T Demeter
Cr C J Evans
Cr P C R Harrow
Cr J M Kane
Cr R I R Little
Cr A R McKay
Cr B S Murray
Cr A G Neill
Cr M E Oldfield
Cr E M Sage
Cr D P Sutherland
Cr R M G Tindall

A meeting of the Committee will be held on
Wednesday, 15 April 2009 at 10.00 am
(or at the conclusion of the Council Meeting)

VENUE:

Council Chamber
First Floor
Pegasus Building
Environment Canterbury
58 Kilmore Street
CHRISTCHURCH

BUSINESS:

As per Order Paper attached
Agendas are available on our website three days prior to the date of the meeting - http://www.ecan.govt.nz/About+Us/Council+Info/Committee+Agendas.htm

Dr Bryan Jenkins
CHIEF EXECUTIVE

RECOMMENDATIONS IN REPORTS ARE NOT TO BE TAKEN AS COUNCIL POLICY UNTIL ADOPTED BY COUNCIL

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Environment Canterbury
Your regional council

COMPLIANCE WITH LOCAL GOVERNMENT ACT 2002 DECISION-MAKING REQUIREMENTS

Except as below, a statement of compliance and a completed decision checklist is required for any agenda item on a council committee or the council recommending that a decision be made. This will be the responsibility of the person signing off the agenda item.

The compliance statement and checklist will not be used for:

- Recommendations that information be received or that the Council make a decision.
- Decisions taken under the Resource Management Act 1991 or the Biosecurity Act 1993 in relation to resource consents, decisions required when following the procedures set out in Schedule 1 of the Resource Management Act 1991, other permissions, submissions on plans, or references to the Environment Court.
- Decisions taken to proceed with enforcement procedures under various primary or secondary legislation or regulations, including procedures under the Resource Management Act 1991, the Biosecurity Act 1993, the Local Government Act 2002, and Environment Canterbury Bylaws.
- Administrative and personnel decisions that are entirely internal to Environment Canterbury.
- Other decisions where the procedures to be followed are set out in Legislation.

COMPLIANCE STATEMENT

The council committee (or the council) must formally certify that:

(a) It is satisfied that it has sufficient information about the options and their benefits and costs, in terms of the region's social, economic, environmental and cultural well-being and the effects on community outcomes, bearing in mind the significance of the decisions.

(b) It is satisfied that it knows enough about and has given adequate consideration to the views and preferences of affected and interested parties bearing in mind the significance of the decision.

INFORMATION CHECKLIST

(a)	A Statement of the Proposed Decision
(b)	A Statement of the Objective of the Proposed Decision and the Issue or Problem being addressed
(c)	A list of all reasonably practicable options, (including doing nothing).
(d)	For each option in (c): An evaluation of the Benefits and Costs, in terms of the region's social, economic, environmental and cultural well-being.
(e)	For each option in (c): A statement of the extent to which community outcomes would be promoted or achieved in an integrated and efficient manner.
(f)	For each option in (c): A statement of the Impact, if any, on Environment Canterbury's capacity to undertake its statutory responsibilities
(g)	If the Proposed Decision is a significant decision in relation to land or a body of water, a statement of how Maori values have been taken into account
(h)	A Statement of significant inconsistencies, if any, with any Existing Policy, Plan or Legislation arising from the Proposed Decision.
(i)	A statement how the views and preferences of affected or interested persons have been given adequate consideration during the definition of the problem or issue, the objective, the assessment of options and the development of the proposed decision, including the particular contribution of Maori to the decision-making process.

Notes:

The significance of proposals and decisions determines how much time, money and effort is put into exploring and evaluating options and obtaining the views of affected and interested parties. The significance of proposals and decisions is determined through reference to criteria contained in the policy on significance.

The policy on significance together with Section 76 of the Local Government Act 2002 set out the Council's requirements in relation to decisions. Some decisions can only be made through the Long-Term Council Community Plan, or after the Special Consultative Procedures set out in the Act have been used, (refer to the policy on significance and the Act).

All decisions of Environment Canterbury are subject to the decision-making requirements of section 76 of the Act unless inconsistent with specific requirements of other legislation.

ENVIRONMENT CANTERBURY

REGIONAL PLANNING COMMITTEE

ORDER PAPER

1. APOLOGIES

2. CONFLICT OF INTEREST

3. MINUTES OF MEETING – 11 MARCH 2009

4. MATTERS ARISING

5. DEPUTATIONS AND PETITIONS

MATTERS FOR RECOMMENDATION TO COUNCIL

6. REVIEW OF THE CANTERBURY REGIONAL POLICY STATEMENT

7. PROVIDING FOR FUTURE COMMUNITY WATER SUPPLIES WITHIN GROUNDWATER ALLOCATION ZONES

MATTER FOR COMMITTEE DECISION

8. WAIMAKARIRI RIVER REGIONAL PLAN REVIEW

MATTERS FOR INFORMATION

9. WATER AQUIFER PUMPING TESTS

10. WAIPARA ENVIRONMENTAL FLOWS

11. NOTICES OF MOTION

12. EXTRAORDINARY AND URGENT BUSINESS

13. QUESTIONS

14. NEXT MEETING – 13 May 2009

ENVIRONMENT CANTERBURY
REGIONAL PLANNING COMMITTEE

MINUTES OF THE MEETING HELD IN THE COUNCIL CHAMBER, ENVIRONMENT CANTERBURY, 58 KILMORE STREET, CHRISTCHURCH ON WEDNESDAY 11 MARCH 2009 AT 9.35 AM.

CONTENTS

PRESENT

Cr R M Kirk (Chair), Crs T K Burke, J T Demeter, C J Evans, R I R Little, A R McKay, B S Murray, M E Oldfield, E M Sage, D P Sutherland and R M G Tindall.

MANAGEMENT AND STAFF

Lynda Weastell Murchison (Planning Manager Air and Rivers) and Louise McDonald (Administration Officer).

1. APOLOGIES

Crs P C R Harrow, J M Kane and A G Neill

2. CONFLICT OF INTEREST

There were no declarations of conflict of interest.

3. MINUTES OF MEETING – 11 February 2009

Resolved

That the minutes of the meeting held on 11 February 2009 be confirmed as a true and accurate record and be adopted.

Cr McKay /Cr Sage

4. MATTERS ARISING

There were no matters arising.

5. DEPUTATIONS AND PETITIONS

There were no deputations or petitions.

MATTER FOR INFORMATION

6. REVIEW OF ENVIRONMENTAL FLOWS PROGRAMME

Lynda Weastell Murchison introduced this item and tabled copies of Appendix 1 (Summary of Current Environmental Flow Regime Reviews) and Appendix 2 (Comparison of Planning Processes for Variations and Plans) to accompany the report attached to the agenda.

Ms Weastell Murchison explained the three planning tools available to review the environmental flows regimes for catchments:

1. Variations to the Natural Resources Regional Plan (NRRP) - the current approach
2. Plan changes to the Transitional Regional Plan
3. Stand-alone Environmental Flow Plans for those catchments that minimum flows have not been included in the NRRP – the approach being recommended.

While it was noted that that the legislation does allow regional councils to have more than one regional plan, it was suggested that the legal implications of having separate plans, and later incorporating them into the NRRP, be checked.

It was explained that one of the advantages of using stand-alone plans was that of timing while the NRRP process is still continuing. The Council can decide later to incorporate stand-alone plans into the NRRP. The point was made that some plans, for example the Waitaki Plan, may not be consistent with the NRRP and may have to stay separate.

The Committee discussed the methodology used in carrying out these reviews and there was support for the holistic approach of the 'building block' method, which included the value of receiving information provided by or requested by the community.

The work and commitment of the communities that had been involved in the review of the environmental flows already undertaken was acknowledged. The importance of keeping all those interested in the process well-informed of the process was stressed, including those people unable to attend initial meetings, and those who are not holders of consents. The length of time taken for these reviews was also cited as an issue for community participation.

During the discussion regarding priorities concern was expressed that priority catchments for environmental flows were not the areas being considered for water management charges.

Cr Sage tabled suggested wording for an amended recommendation, that differed from the recommendation contained in the report attached to the agenda.

A request was made for reports on this work to include budget details.

Recommended to the Council

That the Regional Planning Committee recommends to Council:

(a) that the Environmental Flow Regime reviews which are not yet notified as variations to the proposed Natural Resources Regional Plan (NRRP) be completed as stand-alone plans for each catchment.

(b) That such catchment plans are consistent with provisions in the proposed NRRP as appropriate for each catchment.

(bb) That the evolution and operation of the existing Community Advisory Group process be reviewed.

(c) That a specific community consultation plan be developed for each Environmental Flow Regime review, depending on the issues and interested/affected parties in each catchment.

(d) That Environmental Flow Regimes reviews be prioritised in the following order:

(i) Firstly completion of variations to the proposed NRRP except that work on Variation 8 – Hurunui will take into account the Board of Inquiry's progress on the Water Conservation Order application.

(ii) Secondly, once decisions on these NRRP variations have been notified, drafting and notifying of environmental flow plans for the

1. Waipara, Ellesmere, Pareora;

2. Orari, Waiau, Waimakariri Tributaries; and

(iii) Thirdly once decisions have been notified on environmental flows for the Waipara, Ellesmere, Pareora, Orari, Waiau and Waimakariri tributaries, commencing work on environmental flow regime reviews for Hinds, Banks Peninsula Streams and the review of the Opihi Plan.

(e) That officers report back to the Committee on which, if any, notified environmental flow variations to the proposed NRRP require additional work and possible renotification, and this report to include details of the budget and resources available.

Cr Sage/Cr McKay
Cr Oldfield abstained

7. NOTICES OF MOTION

There were no notices of motion.

8. EXTRAORDINARY AND URGENT BUSINESS

There was no extraordinary or urgent business.

9 QUESTIONS

There were no questions.

10. NEXT MEETING – 15 APRIL 2009

The meeting closed at 11.18 am.

UNCONFIRMED

CONFIRMED

DATE _____ _____ CHAIRPERSON

AGENDA ITEM NO: 6	**SUBJECT MATTER: REVIEW OF THE CANTERBURY REGIONAL POLICY STATEMENT (CRPS)**
REPORT: Regional Planning Committee	**DATE OF MEETING:** 15 April 2009
FILE REFERENCES: RPS/2008/PREP/CONS	**PORTFOLIO:** Democratic **PROJECT:** Regional Policy Statement Review **OUTPUT:** A reviewed CRPS
REPORT BY: Frank Stewart Policy Analyst	**ENDORSED BY:** Andrew Willis Regional Policy and Plan Effectiveness Manager and Jill Atkinson Director, Regional Programmes

PURPOSE

The purpose of this report is to seek directions for the drafting of an "Ecosystems and Indigenous Biodiversity" chapter of the CRPS and initial endorsement of the proposed policy directions.

ATTACHMENTS

Nil.

BACKGROUND

Since the CRPS was drafted in 1998, there have been many new matters relating to indigenous biodiversity both within the Region and nationally that need to be considered. The Resource Management Act 1991 (RMA) has had several changes including the 2003 amendments to Section 30 that give regional councils additional functions for the control of use of land for the maintenance and enhancement of ecosystems in water bodies and coastal waters and the establishment of objectives, policies and methods for maintaining indigenous biodiversity. In addition, a 2005 amendment to the RMA determined that a regional policy statement must state the local authority responsible for specifying objectives, policies and methods for the control of the use of land for the maintenance of biodiversity.

Other matters of significance included the following, (not in chronological order or order of importance):

- The New Zealand Biodiversity Strategy was introduced in 2000 – this strategy identifies priorities for the management of biodiversity in New Zealand, but it does not have the same status or legal force as a National Policy Statement;
- A Regional Biodiversity Strategy has been developed by the region's key biodiversity stakeholders and adopted by those stakeholders including the Regional Council and 8 Territorial Authorities (TAs);
- "Protecting our Places - Information about the Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land" was published in 2007 by the Ministry for the Environment.
- The Proposed Natural Resources Regional Plan (PNRRP) was notified in 2004, and Chapter 7 – Wetlands in particular;
- The Regional Coastal Environment Plan dealing with ecological matters in the coastal marine area was made operative in 2005;

- Many district plans have been put in place with provisions that address biodiversity issues and the clearance of indigenous vegetation in particular;
- The Ngāi Tahu Claims Settlement Act 1998 (NTCSA) was enacted – this is significant because it identifies areas of high cultural value having indigenous biodiversity values;
- Regional Pest Management Strategies have been put in place, including provisions for controlling pests for indigenous ecological purposes (environmental pests); and
- There has been significant intensification of land use throughout the region, particularly involving irrigation, cropping and dairy farming and there has been land tenure changes in the high country which has reduced grazing of indigenous tussock grasslands, all of which has impacted on the region's indigenous ecosystems and indigenous biodiversity.

Existing CRPS Provisions

Provisions for ecosystems and indigenous biodiversity are found principally within the CRPS Chapter 8 – Landscape, Ecology and Heritage, however there are further provisions relating to indigenous biodiversity within chapter 9 – Water, chapter 10 – Beds of Lakes and Rivers and their Margins, and chapter 11 – The Coastal Environment. In addition, Chapter 20.4 of the CRPS includes provisions to assist in determining the regional significance of biodiversity features (habitat and ecosystems) and effects on these features.

Reference is made in the existing policies to the criteria for determining regional significance in Chapter 20 as a means of identifying areas or natural features that are to be subject to protection.

Ecological factors are featured in the Coastal Environment, Water and the River and Lake Beds chapters as part of the values of natural features that are to be protected through the chapter provisions. The other CRPS chapters also have references to ecosystems in relation to possible adverse effects on them that are dealt with in the chapters.

THE PROPOSAL

It is proposed that the Committee approve the proposed directions for drafting an "Ecosystems and Indigenous Biodiversity" chapter of the CRPS. The proposed direction for this chapter is set out below after considering the options.

CONSIDERATION OF THE OPTIONS

A consideration of options for redrafting the chapter is attached as Appendix 1 of this report. These options are broadly the ones put to stakeholders, including Territorial Authority staff, (see comments under "Views of Affected and Interested Parties" below). Appendix 2 of this report shows the indigenous ecosystems and indigenous biodiversity provisions in the existing CRPS Chapter 8 Landscape, Ecology and Heritage in the context of a discussion of the need for changes to those provisions. Appendix 3 shows possible methods for implementing the policies in the chapter.

PROPOSED DIRECTIONS

On the basis of environmental and policy changes, together with staff and stakeholder comments, the following directions for drafting are proposed:

- Chapter title to be Ecosystems and Indigenous Biodiversity.
- Still include wetlands in this Chapter.
- Leave detailed SNA type specification to plans (District and Regional)
- Include a Policy for Environment Canterbury's functions to be guided by the Canterbury Biodiversity Strategy's vision, goals, target actions and priorities.
- Under Section 62:

  Assign to Environment Canterbury:

  (a) The responsibility for the regional overview of the control of use of land for maintaining indigenous biodiversity through its Regional Policy Statement.

  (b) The responsibility for the control of use of land for maintaining indigenous biodiversity in water bodies, including wetlands, in river and lake beds and in the coastal marine area through its Regional Plans.

  Assign to Territorial Authorities:

  The responsibility for the control of use of land for maintaining indigenous biodiversity in all other areas through their district plans.
- Include threats to indigenous biodiversity in the issue as well as effects.
- Include policy identifying the ecological and indigenous biodiversity values to be protected by the region and territorial authorities and the selection of protected areas based on current thinking adapting the material presently in Section 20.4 Regional Significance.
- Cover maintenance, enhancement and restoration of indigenous biodiversity.
- Leave detailed provisions relating to ecology, indigenous biodiversity and pests:

  (a) in the coastal marine area to the "Coastal Environment" Chapter,

  (b) in river and lake beds to the "River and Lake Beds and their Riparian Zones" Chapter, and

  (c) in water bodies other than wetlands to the "Water" Chapter

  (Other than assigning the Section 62 indigenous biodiversity functions.)
- Use the CRPS to establish the key statutory approach to biodiversity management rather than the Canterbury Biodiversity Strategy.
- Include specific requirements in the chapter's policies and methods for District and Regional Plans so that the districts and the region must apply consistent criteria to select priority areas for maintaining indigenous biodiversity; and must have methods, including rules controlling specified activities to achieve this outcome.
- RPS identifies matters of national and regional significance as priorities for biodiversity protection in the region, including (where appropriate) specific areas or habitat types or species/ecosystems.
- Include provisions for other methods such as environmental offsets and biodiversity banking relating to ecosystems or indigenous biodiversity.

- Amend the other ecology provisions (including wetland provisions) in the existing chapter broadly as indicated in Appendices 2 and 3.

CONSISTENCY WITH EXISTING POLICY PLANS OR LEGISLATION

The above proposals are consistent with, and in some cases required by, legislation. Changes to the CRPS may require subsequent changes to regional and district plans.

VIEWS OF AFFECTED AND INTERESTED PARTIES

The issues and options for dealing with indigenous biodiversity issues were discussed with TA staff and other stakeholders as far back as May 2006. More specific discussions on an Issues and Options paper occurred with TA staff in December 2008 and January 2009.

The Issues and Options paper concluded that indigenous biodiversity was a better focus than simply ecology and endorsed the transfer of the landscape and heritage issue to other chapters. An issue discussed was the extent to which objectives and polices should aim for enhancement as well as protection of indigenous biodiversity.

Other issues were whether the focus should be on indigenous biodiversity generally or only areas of regional significance, what criteria for protection should be included, and whether the threats to indigenous biodiversity (including Pests threats) should be identified.

The issue of specifying the respective Territorial Authority and Environment Canterbury roles for indigenous biodiversity was also considered following the new provisions in the RMA requiring such responsibilities to be specified in the CRPS.

There was broad agreement from those consulted that indigenous biodiversity should be considered in a separate chapter. The separation into Landscape and Heritage chapters has already been approved by the Council for drafting and consultation purposes.

It was considered by Territorial Authority staff that the Canterbury Biodiversity Strategy should underpin the CRPS policies. However the strategy promotes a non-regulatory or voluntary approach and the strategy has not been adopted by two of the constituent district councils. The CRPS can require a regulatory approach to maintaining indigenous biodiversity by requiring provisions to be included in district and regional plans.

It was acknowledged that the respective roles of Territorial Authorities and the region would need to be specified in the chapter in accordance with the RMA. It was noted that TAs have already addressed indigenous biodiversity issues in their district plans and that this should continue.

There was consensus that the new chapter should deal with *indigenous* biodiversity only and that the level of detail in the chapter should not extend to identifying specific land areas to be protected. It was considered that detailed specification of areas to be protected should be left to district plans, (and regional plans in relation to water bodies, river and lake beds and the coastal marine area).

RECOMMENDATION

That the Committee recommend to Council that approval is given to drafting an "Ecosystems and Indigenous Biodiversity" chapter of the CRPS following the directions outlined in this report to the committee.

Appendix 1 Consideration of Options

Options	Discussion
Chapter Title/Coverage	
Ecosystems and Indigenous Biodiversity **[Preferred option]**	• This is a sufficient description of the areas covered.
Include Pests in the title	• The Biosecurity Act deals with pests but they should only be acknowledged as affecting indigenous biodiversity. • We are only interested here in effects of pests on indigenous biodiversity, not production effects.
Remove Ecosystems from title	• Ecosystems are not necessarily already included in "biodiversity". • Ecology is dealt with by other chapters (e.g. the beds and water chapters) but inclusion here would be an integrating factor.
Add Indigenous to Ecosystems in the title	• A more narrow focus is not appropriate given the focus of the RMA. • Non-Indigenous ecosystem concerns are mainly trout and salmon and dealt with in Chapter 9 Water. • HOWEVER, non-Indigenous species are a threat to Ecosystems and Indigenous Biodiversity
Include Wetlands and/or other Water Bodies	
Still include wetlands in this Chapter but leave detailed policies on other Water Bodies to the Water Chapter, (apart from assigning the indigenous biodiversity functions for water bodies generally) **[Preferred option]**	• Wetlands are in the existing CRPS Ecology Chapter 8. • Wetlands are more than just a water issue. • Separating out the biodiversity aspect of wetlands in this not an integrated approach.
Leave wetlands to the Water Chapter	• Wetlands are a very important part of Indigenous Biodiversity • Wetlands involve mainly drainage and discharge issues in the water chapters of the CRPS and the NRRP. Wetlands can have a more ecological focus in a biodiversity chapter.

Include detailed policies for all water bodies in the chapter	• Water bodies are a very important part of Canterbury's ecology and indigenous biodiversity. • Water policies need to be treated in an integrated way that cannot be achieved by separating out parts for this chapter. • Ecology and indigenous biodiversity aspects of water bodies are going to be referenced in the chapter anyway without the detailed policies.
List specific Sites for protection at a regional and district level?	
Leave SNA type specification to plans (District and Regional) but still include (where appropriate) some broadly specified areas or habitat types or species/ecosystems that are of regional significance, (e.g. Canterbury Mudfish). **[Preferred option]**	• This does not preclude new priority areas from being addressed • Area specification is not in existing CRPS Ecology chapter. • We can still have criteria for selection of areas. • We can still include the special features identified in the Canterbury Biodiversity Strategy. • There are other planning and voluntary mechanisms for establishing and protecting specific areas. • This is the preference of Territorial Authority staff.
Include detailed specified areas to be protected	• Extensive SNA type consultation would be needed • This is duplicating provisions of most district plans • Opposed by Territorial Authority staff.
Incorporation of Canterbury Biodiversity Strategy	
Include a Policy for Environment Canterbury's functions to be guided by the Strategy's vision, goals, target actions and priorities. **[Preferred option]**	• Strategy has features that provide guidance but are not readily adopted as policy or methods in planning documents. • Not all districts have committed to the Strategy.
Include a method for Environment Canterbury **and districts** to be guided by the Strategy Reference the Strategy's vision, goals, target actions and priorities	• Strategy is non-prescriptive and voluntary, with a non regulatory approach • Environment Canterbury can commit to it, but not all districts
Simply repeat Strategy provisions	• Non-statutory document • Not region wide adoption. (Mackenzie and Hurunui not signatories) • Some Goals read more like Policies or Methods than suitable CRPS objectives and would need redrafting in the CRPS

	context. • We could also restrict to Environment Canterbury non-regulatory functions but this could show a lack of commitment to the strategy.
Local Authority Responsibilities for Specifying Objectives, Policy and Methods for the Control and Use of Land to Maintain Indigenous Biodiversity	
Assign regional overview responsibilities for the control of use of land for maintaining indigenous biodiversity to Environment Canterbury through the CRPS; assign the responsibility for the control of use of land for maintaining indigenous biodiversity in water bodies, including wetlands, in river and lake beds and in the coastal marine area to Environment Canterbury through its Regional Plans; with the responsibility for the control of use of land for maintaining indigenous biodiversity in all other areas assigned to territorial authorities through their district plans. **[Preferred option]**	• We can still have a regional overview whilst being specific for region and district plans. • Wellington Region does this. • Environment Canterbury already has bed and CMA functions under RMA • Environment Canterbury has other responsibilities for beds: - As owner - Soil Conservation and Rivers Control Act • Many rivers are district boundaries. • Control of use of land for this purpose implies rules.
Assign to Environment Canterbury for Water Bodies, including wetlands, River and Lake Beds and the CMA with all other (land) areas to territorial authorities	• No region wide overview. • Environment Canterbury already has bed and CMA functions under RMA • Environment Canterbury has other responsibilities for beds: - As owner - Soil Conservation and Rivers Control Act • Many rivers are district boundaries.
Regional Council has total responsibility (Also is the do nothing option)	• Could still specify district plans as a method • Lack of local autonomy • We could still chose to do so for any district which is seen not to take up the responsibility.
Assign all responsibilities to territorial authorities	• Lack of integration with Environment Canterbury other functions in beds and water bodies. • Territorial authority have boundaries along the middle of many rivers • TAs have no planning role in the CMA unless it is delegated.
Assign responsibility according to individual territorial wishes	• Confusion over responsibilities • Territorial authorities boundaries are along many rivers

Identify Threats to Indigenous Biodiversity	
Include threats in issue 1 **[Preferred option]**	• Pests are already identified as a threat • Danger some threats will be missed and ignored • Other threats are not precluded.
Leave to district plans and regional bed and coastal plans to identify.	• No regional guidance
Identify Regionally Significant Matters (as for existing Regional Significance Section 20.4).	
Include policy identifying the indigenous ecological and indigenous biodiversity values to be protected by the region and territorial authorities and the selection of protected areas based on current thinking adapting the material presently in Section 20.4 Regional Significance. **[Preferred option]**	• More appropriate for overview document • Applies both regionally and locally not just for regionally significant matters.
State the matters of regional significance only.	• Existing regional significance provisions have been largely found wanting • Ignores localised matters which may not qualify as of region wide concern.
Enhancement and Restoration as well as Maintenance of Indigenous Biodiversity Values	
Cover maintenance, enhancement and restoration. **[Preferred option]**	• Consistent with other Chapters • Guidance only can be given, this is not necessarily dictatorial • Regional function of enhancement in relation to water ecosystems including wetlands (Section 30)
Maintenance only	• Enhancement and Restoration requires a commitment that may be inappropriate or unaffordable • Maintenance only is referred to in Section 62 of the RMA, (assignment of responsibilities) and Section 30 functions.
Dealing with the Coastal Marine Area	
Leave CMA to the Coastal Environment Chapter (apart from assigning the indigenous biodiversity functions in the CMA) **[Preferred option]**	• The CMA is a distinct area subject to special /separate controls under the RMA. • We need not be too specific in this Chapter if indigenous biodiversity is covered by the Coastal Environment Chapter as well.
Include CMA in this Chapter	• Coastal Environment is more than the CMA.

Specific Requirements for Regional and District Plans	
Use RPS to establish the key statutory approach to biodiversity management, (not the Canterbury Biodiversity Strategy). Include specific requirements in the chapter's policies and methods for District and Regional Plans so that the districts and the region must apply consistent criteria to select priority areas for maintaining indigenous biodiversity; and must have methods, including rules controlling specified activities to achieve this outcome. RPS identifies matters of national and regional significance as priorities for biodiversity protection in the region, including (where appropriate) specific areas or habitat types or species/ecosystems. **[Preferred option]**	• Gives a more certainty to biodiversity outcomes for the region • Consistent with Section 62 to give direction for RMA plans as a major role for the CRPS. • Provides for consistency of approach across the region. • Increases integration across territorial boundaries • Increases integration across responsibility boundaries (cma and river/lake beds) • Can use a variety of methods (both regulatory and non-regulatory) to achieve outcomes - including reference to the Biodiversity Strategy as one such method. • BUT may be seen as conflicting or overriding the voluntary approach developed in the Biodiversity Strategy, particularly if there is a requirement for district rules on vegetation clearance and grazing on private land containing priority areas.
RPS uses the Voluntary Approach as in the Canterbury Biodiversity Strategy as the CRPS framework for biodiversity management	• Environment Canterbury has already adopted the voluntary approach in the Strategy. • There is a view by some that non-regulatory approach will be more effective. • There is a danger of non-cooperation if we depart from an already agreed non-regulatory strategy. • BUT it is not universally adopted across the region. • More room for local approaches • BUT could result in less consistency across the region • AND could constrain the ability to use regulatory measures to protect indigenous biodiversity (e.g. mudfish habitat) within regional and district plans.
Specific Provisions for other methods such as Environmental Offsets or Biodiversity Banking.	
Include provisions for other methods such as environmental offsets and biodiversity banking or incentive systems related to ecosystems or indigenous biodiversity. **[Preferred option]**	• Can identify where this is appropriate or not appropriate based on the significance of the site and the biodiversity involved. • Less discretion for consent authorities. • Needs more investigation

Leave up to the consent authorities	• One size does not necessarily fit all circumstances. • No overall policy guidance.

Appendix 2 Do the Existing Issues, Objectives and Policies need to be changed?

Provision	Comments
Introduction (headings) (a) Landscapes and ecosystems (b) High country landscapes (c) Indigenous vegetation (d) Forestry (e) Freshwater habitats (f) Natural character of the coast (g) Plant and animal pests (h) Landscape and ecosystem restoration (i) Geological features (j) Cultural values (k) Amenity values (l) Heritage sites (m) Recreation and tourism (n) Biodiversity	• Add Scope of the Chapter section. Reference the water, soils, beds, coastal, landscape, historic heritage and urban and rural development chapters as also dealing, at least in part, with indigenous ecosystems and indigenous biodiversity. • Replace sections on landscapes and heritage sites with appropriate references to other chapters. • Update to reflect legislation and recognise the NZ and Regional Biodiversity Strategies and National Priorities. • Focus on the Canterbury examples. List important Ecological areas and features. • Refer to climate change effects. • Refer to current role of other agencies (e.g. TAs, DOC, pest agencies, NGOs.) • Add positive economic and other benefits of indigenous biodiversity.
Issue 1 Adverse effects of the use, development, and protection of natural and physical resources on the integrity, distinctive characteristics, and contribution to a regional sense of identity of: (a) wetlands, including their overall area and functioning. (b) the natural character of the coastal environment, wetlands, lakes, rivers, and their margins. (c) natural features and landscapes including their cultural, amenity and recreational values. (d) indigenous vegetation, habitats of indigenous fauna and ecosystems. (e) the historical and cultural heritage of Canterbury including its amenity and recreational values. (f) the relationship of Tangata Whenua and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga.	• Retain relevant ecosystem and biodiversity values listed but more context and focus on the adverse effects of land use on those values as the main issue rather than the use, development, and protection of natural and physical resources • Give more prominence to (d). • Replace (e) and (c) with cross references as appropriate. • Include effects on Indigenous flora and fauna as well as their habitats. • Consider more specific issues relating to indigenous ecology, indigenous biodiversity and

	pests, (i.e... as threats to indigenous biodiversity).
Objective 1 Protection or enhancement of wetlands, particularly the gross area of wetlands in the region, their ecological integrity and functioning, their cultural amenity and recreational values, and the preservation of their natural character.	• Protection (Maintenance) **and** enhancement and restoration of wetlands. • Reorder- this is not the primary indigenous ecosystems and indigenous biodiversity objective. • Remove focus on gross area in favour of a values based approach.
Policy 1 a) Adverse effects on the ecological integrity, functioning, natural character, cultural, amenity and recreational values of wetlands (including the effects of drainage, reclamation, clearance of vegetation, burning, grazing, cultivation, dumping, subdivision or building) should be avoided, remedied or mitigated. Where practicable these wetland areas should be enhanced. The particular sensitivity of wetlands to the effects of land use activities should be reflected in the provisions of regional and district plans. b) Significant adverse effects on the natural flows and water levels, or the natural quality of water in any wetland, resulting from an adjoining use of land, the discharge of contaminants, or the damming, use, taking or diversion of water, should be avoided, remedied or mitigated. c) Encourage restoration or enhancement of lost or degraded wetland areas.	• Replace statements of what "should" happen with more prescriptive policy, particularly for regional and district plans? • Replace water policy b) with appropriate references to the water chapter.
Policy 2 Encourage artificial wetland areas in suitable places, either as a strategic improvement in the provision of natural habitats, or as a means of dealing with discharges of contaminants.	• Reword to be less subjective
Objective 2 Protection or enhancement of the natural features and landscapes that contribute to Canterbury's distinctive character and sense of identity, including their associated ecological, cultural, recreational and amenity values.	• Protection (Maintenance) **and** enhancement and restoration. • Delete landscape aspects. • Combine with Objective 3.

Policy 3 Natural features and landscapes that meet the relevant criteria of sub-chapter 20.4(1) should be protected from adverse effects of the use, development, or protection of natural and physical resources, and their enhancement should be promoted. Activities that may have adverse effects include those involving the clearance or modification of areas of indigenous vegetation (particularly tall tussock), earthworks, alteration to landforms, tree planting, or the erection of structures. The particular sensitivity of these natural features and landscapes to regionally significant adverse effects in terms of sub-chapter 20.4(2) should be reflected in the provisions of district plans in the region. Assessments of effects should be made by considering: (i) aesthetic values; (ii) expressiveness; (iii) transitory value; natural science factors.	• Combine into a more general policy 4 dealing with protecting and enhancing indigenous biodiversity as well. • Remove "regional significance" parts and replace with specific relevant criteria for districts and the region, using and adapting the material in the existing CRPS and the NZ and Regional Biodiversity Strategies (and other regional policy statements, (e.g. Waikato). • Broaden the criteria to encompass local effects. • Replace Natural feature and landscape aspects with appropriate references to the Landscape chapter. • Replace the "should" statements with more directive policies and methods. • Replace the lengthy associated details in the explanation with definitions of the terms. • Bring in pest effects here.
Objective 3 Protection or enhancement of: (i) Indigenous biodiversity, (including the survival of threatened species, communities and habitats, and species, biological communities and habitats unusual in, or characteristic of Canterbury); (ii) Indigenous ecosystem functioning; and (iii) Indigenous vegetation and habitats which contribute to the region's natural character.	• Protection (Maintenance) **<u>and</u>** enhancement and restoration. • Combine with Objective 2.

Policy 4 (a) Areas of indigenous vegetation and habitats of indigenous fauna that meet the relevant criteria of sub-chapter 20.4(1) should be protected from adverse effects of the use, development, or protection of natural and physical resources, and their enhancement should be promoted. In particular, indigenous species, communities and habitats that are threatened, unusual in, or characteristic of Canterbury should be identified, and their survival, and the survival of ecosystems on which they depend, safeguarded as far as practicable. (b) The particular sensitivity of these areas of vegetation or habitats to regionally significant adverse effects in terms of sub-chapter 20.4(2) should be reflected in the provisions of district plans in the region	• Remove "regional significance" parts and replace with specific relevant criteria, using the material in the existing CRPS and the NZ and Regional Biodiversity Strategies. • Adopt appropriate parts of the NZ and Regional Biodiversity (national and regional) Strategies and priorities into the CRPS • Bring in pest effects here too
Methods 1. Regional Council: (a) Regional plans (b) Investigations (c) Encourage the preparation of iwi management plans (d) Information provision (e) Use of other legislation (f) Advocacy, promotion and co-operation (g) Heritage orders (h) Resource consents 2. District/city councils in the preparation, variation, change or review of their district plans.	• New/amended methods specific to the policies. • Adopt appropriate methods from the NZ and Regional Biodiversity Strategies • More specific directions to Territorial Authorities for their district plans. • See the possible suite of methods attached as Appendix 3

Environmental Results Anticipated (1) Protection or enhancement of distinctive characteristics of the Canterbury region, including: (a) natural values within wetland areas identified in Policy 1(a); (b) landscape values within areas identified in Objective 2; (c) biological values within areas identified in Objective 3; (d) heritage values within historic places or areas identified in Objective 4; (e) wahi tapu and other taonga of value to Tangata Whenua within any of the above areas. (2) Protection of the quantity and quality of water within existing wetlands. (3) Greater use of artificial wetlands as means of water treatment or as natural habitats.	• Link explicitly to the new objectives, (without actually needing to refer back to them).
Monitoring Effectiveness	• Replace with provisions in a new monitoring chapter.

Appendix 3 Possible Suite of Methods

1. The Regional Council will undertake investigations, and coordinate with the investigations of other agencies, to identify wetlands, areas within the coastal marine area, and areas within the beds of rivers and lakes and their riparian zones where there are significant indigenous biodiversity and indigenous ecological values that need to be protected from inappropriate use and development of those wetlands and other areas.

2. The Regional Council must give effect to Policy 8.x.x 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 in the coastal marine area; and the entry to and passage along those beds and in the coastal marine area, for the purpose of maintaining the indigenous biodiversity and indigenous ecological values of those areas.

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 avoid significant adverse effects on indigenous biodiversity and indigenous ecological values, 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 advocate and promote the appropriate establishment of: reserves, covenants, heritage orders, bylaws and management agreements that will avoid, remedy or mitigate adverse effects on indigenous biodiversity and indigenous ecological values.

5. Territorial authorities must give effect to Policy 8.x.x in district plans by setting out objectives, policies and methods to control the effects of the use development, or protection of land that is not in the beds of rivers and lakes, and not in the coastal marine area, in order to avoid, remedy or mitigate any adverse effects on indigenous biodiversity and indigenous ecological values. Such provisions must cover all forms of land ownership, use and tenure regardless of its existing protective or non-protective status.

6. Territorial authorities must give effect to Policy 8.x.x in district plans by:

   (a) identifying areas of significant indigenous biodiversity and indigenous ecological value for special protection, applying the criteria in Policy 8.x.x, including providing for setbacks from water bodies; and

   (b) controlling the adverse effects from land use on the indigenous biodiversity and indigenous ecological values of those areas, including control of the adverse effects of the provision of public access, land development, forestry, vegetation clearance and stock grazing.

AGENDA ITEM NO: 7	**SUBJECT MATTER: PROVIDING FOR FUTURE COMMUNITY WATER SUPPLIES WITHIN GROUNDWATER ALLOCATION ZONES**
REPORT: Regional Planning Committee	**DATE OF MEETING:** 15 April 2009
FILE REFERENCES: NRRP/2002/V1/NOT/GEN	**PORTFOLIO:** Water **PROJECT:** 034000 NRRP Ch 4-8 **OUTPUT:**
REPORT BY: John Glennie Natural Resources Policy Manager	**ENDORSED BY:** Don Rule Director Resource Planning and Consents

PURPOSE

This report backgrounds the issue of providing for new supplies for community stock drinking water and community drinking water supplies in groundwater allocation zones. It sets out ways in which NRRP can better provide for water supplies for:

- community water supplies serving towns, including those with industrial demand
- community drinking water supplies and community stockwater supplies.

The report identifies a series of short and longer term options, and recommends a variation to Chapter 5 of the proposed Natural Resources Regional Plan that will make it easier to get permits for small takes for community stock water or community drinking water supplies, where allocation limits have already been reached.

ATTACHMENTS OR DOCUMENTS PREVIOUSLY CIRCULATED

A short report on this topic was tabled by the Chief Executive at the March 2009 Council meeting.

BACKGROUND

With the demand for water for irrigation likely to continue increasing until available water is fully allocated, it is desirable that explicit allocations are set aside in NRRP for community water supplies to help reduce the risk of over allocation.

The RMA provides for individuals to obtain water for domestic and stock drinking provided there are no adverse effects on the environment. To help provide certainty as to the scale of take that is unlikely to cause adverse effects, the proposed NRRP contains permitted activity rules setting out rates and daily quantities.

As a result of submissions on NRRP, an officer report to the hearing committee is recommending that the permitted activity rate of take and daily volume from rivers be related to river size, increasing as the size of the river increases.. Such a sliding scale approach does not work for groundwater and the threshold remains 10m3/day at up to 5 L/s. In neither permitted activity situation is an allowance made within surface water or groundwater

allocation limits for the cumulative sum of the permitted takes, because that sum is assumed to not be significant.

Larger takes for community drinking water supplies/community stockwater need to be consented as they can have adverse effects, for example, when taken from a small stream, or by causing interference effects with nearby wells if from groundwater. Nevertheless, the amount of water required is generally relatively small compared to many irrigation takes. For example:

- a take of 35 L/s is sufficient to provide 300L/person/day to 10000 people. 350L/s will supply 100000 people.
- a take of 12.2 L/s can supply 10000 lactating cows at 105 L/cow/day (the highest stockwater demand on a hot dry nor westerly day). 8 L/s would supply 10000 dry cows or beef the peak 68 L/day they need.
- a take of 120L/s , is required to irrigate 200 hectares of pasture, running about 600 dairy cattle (0.6 L/s/ha or 5.1mm/day)

Applications to take water for community drinking water supplies or community stock water, usually have relatively minor environmental effects because of the small rate of take, and are usually granted. Nevertheless, per Policy WQN14(9)(e), they should be provided for within the relevant surface water or groundwater allocation regimes. This should happen in future when environmental flow and allocation regimes are set, and can be readily provided where the A allocation block in a river, or the allocation limit within a groundwater zone, are not fully allocated.

It is more problematic where allocation limits have already been reached, for example in fully allocated groundwater zones, but this is not a sufficient reason for not providing allocations for future community water supplies. It is possible to claw back allocation under certain circumstances, for example, Policy WQN14(11) has claw back provisions and could be used over time to secure water for future community water supply demands. Alternatively, where future reserves for stock and drinking water have not been catered for, consent renewals could provide for relinquishing the quantity needed for stock and drinking water when required.

Existing Policy WQN14(9)(f), authorises the taking of water for community drinking water supplies/community stockwater when its not provided for within an allocation regime e.g. red zone, or from a river, provided it does not affect the reliability of supply for existing water permits. However, it's not possible to take additional water when allocation limits have been reached without having some effect on reliability. Such applications are treated as a non complying activity. But given the low rates of take/volume for stock drinking or community drinking water supplies, and that they are essential uses, this seems unnecessarily onerous. Subject to consideration of the size/peculiarities of the resource that water is to be taken from, it should be possible to have small rates of take/volumes treated as controlled or restricted discretionary activities. This is a situation that needs remedying, but unfortunately there are no submissions providing scope to make such a change, so a variation to NRRP would be needed. This could be done fairly quickly.

CONSIDERATION OF OPTIONS

(a) **Options available** – A suite of options has been identified that collectively, over the short and longer term, will provide for future community water supplies within NRRP, and make it easier to obtain water for community stock drinking water and community drinking water supplies in groundwater zones and rivers that are already fully allocated. Options for achieving this are:

Short term options

1. Notify a variation to Policy WQN14(9)(f) to amend the last two lines to read something like : "…that the take will not cause adverse effects on instream values, or localised groundwater interference effects, or adversely affect the availability of water for existing community drinking water/stockwater supplies, or availability for an individual's existing domestic/stockwater."

2. Amend the relevant groundwater take rule so that a community drinking water/stockwater take from groundwater is a controlled activity, except in the Waipara GW Zone where it should be restricted discretionary as even small rates of take can have a significant drawdown.

3. Amend the relevant surface water take rule so that a community drinking water/stockwater take from surface water is a restricted discretionary activity with provision that an application may not be notified.

4. Compile a list of all consents within the ECan consents database that could be for community or stock water supplies. Initiate discussions with district councils to ascertain what they see as their water supply needs for the next 30 years (within the UDS area it appears this is already being done).

5. Compile a list of consent renewals in terms of volume and timing for zones where allocation limits are exceeded and additional stock and drinking water allocations are needed to meet projected demand.

Longer term options

1. As further environmental flow and allocation regimes are developed, consult with the relevant district councils so that specific provision is made within the A allocation block for future community drinking water/stockwater demands, including urban supplies that may serve industry and other significant users.

2. As groundwater zones are brought through from Schedule WQN4 to Schedule WQN3, that specific provision is made via the consultation process to include provision for community water supplies.

3. Alternatively, following consultation with district councils, introduce a variation that adds any future demand to the size of the allocation block. In some cases existing consents held by district councils may be sufficient to provide for parts of their district for the next 30 years. I In other cases there may be options to improve systems to be more efficient with the conveyance and use of water already entitled to be take, that will make more water available…

4. Where a zone is already fully allocated, and providing for future community use would increase the over allocation, then upon review of consents in a groundwater zone e.g. when NRRP becomes operative, or when an allocation limit moves from Schedule WQN4 to Schedule WQN3, any water that is freed up is "withdrawn" and not reallocated until the consented allocation is no more than the zone limit. (existing NRRP Policy WQN14(11) provides for this to happen)

5. Any allocation within a consent that is relinquished in full or in part is "withdrawn" and not reallocated until the consented allocation is no more than the river A allocation limit or groundwater zone limit. Maintain a "live" running account of water relinquished/saved within each groundwater zone relative to the community water supply/stockwater demand identified as necessary for the next 30 years. Note that the need to do this will vary between district councils and between rivers/groundwater zones as the rate of take/volume needed for growth in the next 30 years may be very small. Further, the amount of demand projected will not be needed immediately and the processes set out in 4 and 5 may well achieve the allocation outcome

(b) **Benefits and Costs**. Making provision for future community water supplies within water allocation regimes will be beneficial for community wellbeing as it will help provide transparency and certainty as to how water is allocated. Where providing an allocation for future supplies expands the total allocation block beyond what is desirable in the long term, mechanisms are available for progressively reducing the difference so that in time the community water supply allocation falls within the allocation block. The environmental cost of having an expanded allocation regime may therefore not arise as the impact only becomes real when it is actually taken up, some time in the future.

Reducing the rule threshold test from non-complying to controlled or restricted discretionary for small takes for community stock drinking supplies or community drinking supplies, means that it will be less costly for applicants. Because the quantities are small, the impacts on reliability of supply for existing abstractors, and on environmental and cultural values, should also be small in most cases. Larger takes for community water supplies are already adequately addressed in NRRP.

Overall, it is considered that the benefit of implementing each option outweighs the cost.

(c) **Community Outcomes**. Specifically providing an allocation of water in NRRP for future community water supplies, and managing these through NRRP provisions and consent conditions, will help achieve LTCCP community outcomes relating to:

- "Water – water is in a healthy condition, clean and plentiful enough to support life"
- "Sustainable business and farming - business and farming do not harm the environment"
- "Economy - a strong economy"

(d) **Statutory Responsibilities**. Environment Canterbury is responsible for establishing water allocation regimes and is doing so through the NRRP. Making provision for future community water supplies is consistent with its functions under s30(1)(4) to allocate water to specific activities.

(e) **Effects on Maori**. Because implementation of the recommendations will require a variation to NRRP, this will necessarily involve consultation per RMA Schedule 1 with Maori, primarily TRONT and runanga, during which any impacts on cultural values can be assessed.

CONSISTENCY WITH EXISTING POLICY, PLANS OR LEGISLATION

This proposal is consistent with the RMA and both the RPS and existing proposed NRRP provisions but does require a variation to the NRRP.

VIEWS OF AFFECTED AND INTERESTED PARTIES

Where a variation is required, consultation in terms of RMA Schedule 1 will be undertaken.

FINANCIAL

The cost of developing the variation will be absorbed within the existing NRRP budget. NRRP staff will be responsible for progressing the work programme.

RECOMMENDATIONS

(a) That the Regional Planning Committee recommend to Council that it progressively pursue the short and long term options identified in the report above

(b) That staff be authorised to commence preparation of a variation to give effect to the first three short term options identified in the report above.

AGENDA ITEM NO: 8	**SUBJECT MATTER:** WAIMAKARIRI RIVER REGIONAL PLAN REVIEW
REPORT: Regional Plan Committee	**DATE OF MEETING:** 15th April 2009
FILE REFERENCES:	**PORTFOLIO:** **PROJECT:** Review of Waimakariri River flow regime **OUTPUT:** Plan Change to WRRP
REPORT BY: Anna Veltman/Matthew McCallum-Clark	**ENDORSED BY:** Don Rule, Director Resource Planning and Consents

PURPOSE

In 2007 Environment Canterbury initiated the project for development of a draft plan change to the Waimakariri River Regional Plan (WRRP), to review existing minimum flow and water allocation for the Waimakariri River mainstem. Preparation of the proposed plan change and undertaking consultation as required under the First Schedule of the RMA 1991 was approved at a Council meeting on 29 November 2007.

The need for a plan change to the WRRP has arisen as more pressure is placed on accessing large quantities of water from the mainstem of the Waimakariri River for large scale developments. In addition, there is some ambiguity and difficulty in interpretation of some of the plan provisions relating to daily water availability as flows reduce to the minimum flow.

Technical reports by NIWA on bed sediment movement and B/C Block water allocation have been peer reviewed and published. These reports have been discussed at the Council Workshop of 26th March 2009.

ATTACHMENTS

- Draft plan change, including explanatory text.

MAJOR COMPONENTS OF THE DRAFT PLAN CHANGE

The Proposed Plan Change consists of the following major components:

1. A new 5.126m^3s^{-1} "AA" block be established for the Waimakariri River that allocates water for community and stock water requirements;
2. An allocation limit be placed on the Waimakariri River "B" Block of 40m^3s^{-1};
3. The minimum flow at which "B" Block abstraction may commence is raised to 93m^3s^{-1} for the Waimakariri River, which will result in a 30m^3s^{-1} "gap" being established between the A and B allocation blocks. The gap is suspended from May to August;
4. A new "C" Block of 10m^3s^{-1} is established for the Waimakariri River;
5. Provision for summer freshes and floods in the Waimakariri River to pass without abstractions after a period of low flow (21 days) or if nuisance algal or weed growth occurs, to maintain ecological values;

6. Shift the flow measurement point from the Old Highway Bridge to Otarama, which is above the point of take for the majority of abstractions. This will require some adjustment of the minimum flow value to account for measured losses/gains between the Old Highway Bridge and Otarama (no change other than this "calibration" to ensure equivalency between the measurement points is envisaged);
7. Delete the term "unmodified flow" in Rule 5.1(d) as it is problematic to interpret and enforce. The movement of the monitoring point to Otarama will make this term redundant;
8. Improve the ability to consider cumulative effects by removing the restriction on discretion to considering only the effects "near the point of take";
9. Change the monitoring requirement so that all takes are to be continuously measured and unmodified data made available to ECan via telemetry;
10. The status for activities that do not meet Rule 5.1 are clarified as non-complying activities in Rule 5.3; and
11. Alter the planning maps to correct the shown catchment boundaries of the "below Woodstock" area.

RECOMMENDATION

That the Regional Plan Committee approve the draft Plan Change to the Waimakariri River Regional Plan as the basis for public consultation.

Plan Change 1 to the Waimakariri River Regional Plan

Contents

Introduction

The need for a plan change to the Waimakariri River Regional Plan (WRRP) has arisen as more pressure is placed on accessing large quantities of water from the mainstem of the Waimakariri River for large scale developments. In addition, there has been some historical ambiguity and difficulty in interpretation of some of the WRRP provisions relating to daily water availability as flows reduce to the minimum flow.

Technical reports by NIWA on bed sediment movement and water allocation have been peer reviewed and published. These reports provide the technical basis for addressing the issues relating to maintaining instream values and indicate what amendments to the flow and allocation regime may be required to meet the stated objectives in the WRRP.

The Existing WRRP

The hydrological investigations and plan development work that was done for the WRRP identified the river as a relatively unreliable source of water for major run of river irrigation schemes, especially if dairying was a significant land use. This is because the river commonly has low flows during the February-March period and often is unable to meet full demand for the "A" Block provided for in the WRRP.

The WRRP currently provides for:

- A minimum flow of $41m^3s^{-1}$ (41,000 litres per second) measured at the Old Highway Bridge;
- An "A" block of $22m^3s^{-1}$;
- A "B" block with no upper limit on the size of the "B" block; and
- No gap between the "A" and "B" blocks

This regime was in part based on an assumption that river flows, and particularly the "B" block, was so unreliable that a run of river large irrigation scheme would not be economic. A large irrigation scheme founded on takes into storage at higher flows, such as the Central

Plains Water Enhancement Scheme (CPW), was not contemplated during plan preparation. With CPW, and potential other requests to take water, it is timely to consider what the limits should be on allocation, and what flow regime requirements might be needed to appropriately manage the effects on instream values of different allocation scenarios.

The minimum flow and allocation regimes for Waimakariri River have been assessed by NIWA through the two technical reports mentioned previously:

Duncan, M. And Bind, J., Waimakariri River Bed Sediment Movement for Ecological Resetting, Environment Canterbury Report No R08/94
This study determined the flood flow at which the median flow river bed is disturbed sufficiently to remove excess algal growth, fine particles etc in order to maintain the health and productivity of the river. The frequency of occurrence of the flood flow before and after abstraction was then assessed to determine the effect of large irrigation abstraction and/or proposed allocation frameworks on the frequency of disturbance.

Duncan, M., Waimakariri River: B/C Block Allocation Review, Environment Canterbury Report No 08/67
This study assessed the environmental effects of different sizes of the "B" and potentially a "C" allocation blocks and the appropriate flow regime required to minimise these effects. The study determined that the critical issue is the need to have flows in the range 55-96m^3s^{-1} during September to December for riverbed nesting bird breeding and to have flow in the range 60-100m^3s^{-1} during December to April for salmon angling. In addition, the review identified the need to ensure the flow and allocation regime allows certain freshes and large floods to pass without take.

Major Components of the Change:

The Proposed Plan Change consists of the following major components:

1. A new 5.126m^3s^{-1} "AA" block be established for the Waimakariri River that allocates water for community and stock water requirements;
2. An allocation limit be placed on the Waimakariri River "B" Block of 40m^3s^{-1};
3. The minimum flow at which "B" Block abstraction may commence being raised to 93m^3s^{-1} for the Waimakariri River, which will result in a 30m^3s^{-1} "gap" being established between the A and B allocation blocks, suspended from May to August;
4. A new "C" Block of 10m^3s^{-1} be established for the Waimakariri River;
5. Provision for summer freshes and floods in the Waimakariri River to pass without take after a period of low flow (21 days) or if nuisance algal or weed growth occurs to maintain ecological values;
6. Shift the flow measurement point from the Old Highway Bridge to Otarama, which is above the point of take for the majority of abstractions – this will require some adjustment of the minimum flow value to account for measured losses/gains between the Old Highway Bridge and Otarama (no change other than this "calibration" to ensure equivalency between the measurement points is envisaged);

7. The term “unmodified flow” in Rule 5.1(d) is problematic to interpret and enforce. The movement of the monitoring point to Otarama will make this term redundant and it can be removed;
8. Improve the ability to consider cumulative effects by removing the restriction on discretion to considering only the effects “near the point of take”;
9. Change the monitoring requirement so that all takes are to be continuously measured and unmodified data made available to ECan via telemetry;
10. The status for activities that do not meet Rule 5.1 are clarified as non-complying activities in Rule 5.3; and
11. Alter the planning maps to correct the shown catchment boundaries of the “below Woodstock” area.

The Proposed Flow Regime

The alterations to the flow regime affect the Waimakariri River mainstem only – the various tributaries are subject to a separate review which is currently underway.

New “AA” Block Allocation for Community and Stock Water Use

The total stock water and domestic community water supply take from the Waimakariri River is currently approximately $4.896 m^3 s^{-1}$. The stock water and domestic community water supply takes are currently exempted (up to specified amounts) from the “A” block minimum flow restrictions and have not been counted within the current “A” block allocation.

When the WRRP was notified in 1996, the quantity of stock and community water supply taken totalled approximately $3.8 m^3 s^{-1}$. At the time the plan was drafted, it was envisaged that there were unlikely to be significant applications for further stock and community water supply takes. However, in the intervening 10 years, the amount consented has increased by over 25%. If the total take exempted from restriction continues to increase, the Waimakariri River minimum flow restriction could be compromised.

The majority of the presently consented $4.896 m^3 s^{-1}$ is used for stock water race systems. There is uncertainty about the ultimate use of the water in these systems, the management of the takes and potential for efficiency gains within the present allocation. Some of these uncertainties have been created by the present WRRP, which treats stock and community water supply as being outside of the allocation mechanism set out in the Plan and subject to far fewer restrictions.

In the NRRP, Policy WQN14(9)(e) allows for provision to be made to reserve water for future community stockwater and drinking water supply. Where there are opportunities to consider the reserving of water for such purposes as part of other processes, Environment Canterbury is considering doing so. This is now occurring as part of the environmental flow review processes for surface water catchments throughout the region.

This plan change process also provides such an opportunity. The Waimakariri River is bounded by the three local authorities - Selwyn, Waimakariri and Christchurch City. The existing allocation includes takes by both Waimakariri and Selwyn districts. At this point in

time Christchurch City does not access water from the Waimakariri River for community supply purposes.

The advantage in creating an allocation block for community and stock water purposes is that it provides a means for ensuring that water is clearly reserved for that purpose, and cannot be permanently transferred to other uses.

In the WRRP, Policy 5.3 provides for 230 litres per second to augment the Cust River to protect and enhance its instream values even when the flow in the Waimakariri River is at or below the minimum flow set in the plan. This allocation could also be included in the same block as a means of more clearly providing for it. As that take is not subject to the minimum flow under the plan, it can be treated in the same way from an allocation point of view.

Based on the above, it is recommended that a new "AA" block be established that includes the existing allocation for community and stock drinking water of 4.896 $m^{-3}s^{-1}$ and 0.230 $m^{-3}s^{-1}$ for augmentation of the Cust River. Thus the "AA" block would be 5.126 $m^{-3}s^{-1}$.

At this time there is no recommendation to allocate more for the community and stock water as this existing allocation is thought to be used for other purposes as well, and where it is used for stockwater, there is considered an opportunity to increase the efficiency of that use. However, if it can be justified that more water should be reserved for such future use at this time, this allocation volume may need to be increased, and consideration would need to be given as to the effects of that on the low flows in the river.

Under the existing standards and terms, water that is taken for stock and community drinking water is not required to cease at the minimum flow, but is required to restrict the taking of water for only essential uses as set out in (f) (page 29 WRRP). Given this, there is a need to include the size of the block as part of the plan change and ensure the exemption from restrictions is provided for as set out in Standards and terms (f).

"A" Block Allocation

The current "A" block size of 22m^3s^{-1} is not altered by this Plan Change. The "A" Block is currently fully allocated.

"B" Block Allocation

The "A" block currently has an allocation limit of 22m^3s^{-1} with a minimum flow before takes can commence of 41m^3s^{-1}. Because the A block is fully allocated, new abstractors can only be accommodated within the "B" block. Abstractors from a "B" block are required to cease abstraction at a higher cut-off limit to protect the reliability of supply to the "A" block abstractors. Currently, the "B" block has a minimum flow equal to the sum of the "A" permit minimum flow and the "A" allocation block (63m^3s^{-1}).

With the "A" and "B" blocks running consecutively, there is a substantial risk of abstractions taking all the water above the minimum flow for extended periods, an effect commonly referred to as 'flat-lining' the river.

By providing a gap between the "A" and "B" blocks, flushing flows that are important in washing algal growth[1] and sediment from the riverbed, and variability of flow for instream river users can be maintained. It can also provide for future upward movement of a minimum flow for the "B" block should monitoring data show that Objective 5.1 values are not being achieved. For these reasons, a gap between the "A" and "B" blocks of $30m^3s^{-1}$ is proposed, for the non-winter months (September-April).

In addition, the recent demands for "B" block water, primarily for storage, have identified that the present flow and allocation regime in the WRRP, which does not provide any limit on the amount of water that can be taken, is not appropriate. In preparation of the WRRP, it was envisaged that approximately $8m^3s^{-1}$ of "B" block water might be sought over the life of the WRRP. Already, over five times this amount has been applied for. On this basis, it is appropriate for the WRRP to provide an upper limit to the amount of water that may be taken from the "B" block for the Waimakariri River, in order to protect the values identified in Objective 5.1, and this is proposed to be $40m^3s^{-1}$.

"C" Block Allocation

The purpose of a "C" Block would be to give access to water to consent holders who are still to apply for consents and give the "B" Block consent holders some certainty about access to their allocation.

The "C" Block would provide the opportunity for small users to gain access to some water should the "B" Block allocation be allocated to a single entity or just fully allocated. However, the "C" Block would be quite unreliable and hence would generally only be suitable for storage. Water could only be taken at $10m^3s^{-1}$ approximately 20% of the time.

Additional environmental flow requirements – protection of freshes and floods

Floods control the form and overall dimensions of the river channel. A flood is a large event (over $700m^3s^{-1}$) that is sufficient to rework the gravel bed. Floods rework gravel bars and cause branch channels to cut laterally into banks and bars. Floods are needed to maintain the braided character of the Waimakariri River and to remove vegetation growing in the riverbed so that open shingle habitat can be maintained. This habitat is important to the bird species present.

In between the infrequent floods, freshes, especially those in summer, perform a vital role in cleansing the river of much of its excessive algal growths. This helps maintain habitat for invertebrates, and hence the food supply for fish and birds. A fresh is a period of higher flow, usually marked by dirty water that is sufficient to remove algal growths and move fine sediment. Duncan and Bind (2008) suggest that long filamentous algae would be flushed from the minimum flow channel at a flow of approximately $82m^3s^{-1}$ and from the median flow channel when the flow is approximately $130m^3s^{-1}$.

After a flood has turned over and cleaned the gravel, algal growths slowly build up, coating the stones and providing food and shelter for aquatic organisms, which themselves build up in abundance and provide food for fish and birds. The composition of the species making up the algal community changes over time. If the period between freshes and floods is long

[1] "Algal growths" refers to a variety of algal and bacterial growths, technically referred to as "periphyton"

enough, and there are sufficient nutrients in the water, some forms of algal growths start to grow at an exponential rate.

These large algal growths, often seen as mats and long green filaments, change the stream habitat and water chemistry, particularly the pH and oxygen content. This reduces the diversity and abundance of aquatic organisms. In addition to reducing the life-supporting capacity of the river, these undesirable algae degrade other instream values, e.g. its mauri, natural character, and amenity. The next flood or fresh cleanses the river of algal growths, refreshes the gravels, and the cycle begins again.

Abstractions are likely to reduce the magnitude and frequency of small freshes capable of flushing sediment and algal growths. In order to mitigate this effect, Duncan and Bind (2008) suggests that the frequency of freshes of over $80m^3s^{-1}$, and preferably over $130m^3s^{-1}$ should be maintained after a period of low flow of sufficient duration to potentially allow the algal growths to reach nuisance levels. Thus during periods of low stable flows when algal growths reach nuisance levels after about 21 days (Biggs, 2000), freshes occurring after 21 days of minimum or low flow should be allowed to flow untapped until the flow has exceeded $130m^3s^{-1}$, or after two days, whichever is the sooner.

The proposed Plan Change has established an environmental flow regime to promote algal growth and fine sediment flushing and to maintain channel forming flows. This is achieved by both establishing a “gap” between the “A” and “B” allocation blocks and requiring specific restrictions for abstractions that allows freshes and floods to pass without takes occurring after a sustained period of low flows.

In addition, an amendment to Method 5.3.3 is recommended. This is to include an additional monitoring project to specifically measure the effectiveness of the new environmental flow and allocation regime for the water resource of the Waimakariri River (including the Kowai River) “below Woodstock” in meeting the requirements of Objective 5.1. In this way, the technical modelling work on which the flow regime is based can be validated by on the ground measurement and observation. If such a project identifies any issues with the regime, this will help provide the technical basis for any further change.

New Measurement Site at Otarama and “Unmodified Flow”

Environment Canterbury has recently installed a new flow measuring site with telemetry at Otarama. This Plan Change seeks to change the minimum flow site for measuring the Waimakariri River mainstem from the Old Highway Bridge to Otarama.

Having the flow measured at an upstream site such as Otarama has several advantages, including:

1. The measurements are taken before any significant abstraction occurs, thereby measuring “natural” flows;
2. There is a likelihood of “B” Block abstraction points being located upstream of “A” Block abstraction points, adding to the difficulty of managing flows; and
3. The Old Highway Bridge Site is affected by tidal flows.

However, concerns are likely to be raised regarding the impact on existing permit holders due to losses/gains between Otarama and the Old Highway Bridge. To address this concern, Environment Canterbury has undertaken a study to find the relationship between the flows of the Waimakariri River at Otarama site and the flows at the Old Highway Bridge site. The site at Otarama had a water level recorder in the 1960s but was subsequently closed. The site was re-established in May 2008 and flow gaugings have been carried out. At present there is no rating at this site, but with subsequent gaugings a rating will be established in the near future.

Currently, there are 11 gauging measurements undertaken at the Otarama site, four of these were done concurrently with the Old Highway Bridge site. There is a rated water level site at the Old Highway Bridge, which has been operating since 1969. These two data sets were combined to identify a relationship between the two sites. Using "naturalised" flows at the Old Highway Bridge shows that a flow at the Old Highway Bridge of $41m^3s^{-1}$ equates to a flow at Otarama of $45.04m^3s^{-1}$.

For the purpose of this Plan Change, the flow relationship between Otarama and the Old Highway Bridge site is viewed as an interim relationship. This interim relationship will be reviewed once additional information on the flow relationship between Otarama and the Old Highway Bridge site has been established.

A further significant advantage of the movement of the flow measuring point is the ability to dispense with the "unmodified flow" terminology in the Plan. The current Standards and Terms in Rule 5.1 refers to "A" Permits ceasing to take when the "Unmodified Flow" is at or below the "Minimum Flow" specified in Table 2 ($41m^3s^{-1}$). This requires estimation by Environment Canterbury of the amount of water being abstracted, and adding this to the measured flow to identify the "Unmodified Flow". This estimation is difficult in the absence of real-time data on abstractions. These difficulties and uncertainties can be avoided when the flow is measured upstream of abstraction points.

A consequential amendment is the updating of Figure 5, which shows the measurement points, to delete the Old Highway Bridge and insert Otarama.

Improved Assessment of Cumulative Effects

Currently, Rule 5.1 of the WRRP restricts the exercise of the Council's discretion on the effects of a surface water take on river flow and aquatic, community and recreational values to "near the point of take". While uncertain, the term discourages the assessment of effects on the wider river values downstream of the point of take and of the cumulative effects of a water take in conjunction with other water takes.

The Plan Change proposes to delete this terminology, so that there is no restriction on the Council's ability to consider the values identified in Objective 5.1(a) to (h).

Measurement of Takes and Telemetry Data

Improvements to the requirements to measure the water takes and in the methods available to provide the data to Environment Canterbury are proposed within this Plan Change.

The information obtained from measuring water takes can be used to support many aspects of water resource management, including:

- Real time management during periods of water shortages;
- Quantifying and enabling access to any unused water;
- Collective management of takes by groups of water users;
- Monitoring compliance with resource consent conditions;
- Improved understanding of water resources and ecosystem responses (based on actual amounts taken);
- Informing planning for future economic growth for communities.

The Ministry of Environment (MfE) has proposed a National Environmental Standard for Water Measuring Devices (NES). The proposed NES seeks to prescribe minimum requirements for water measuring devices, installation and maintenance of the equipment, and data recording and data transfer to regional councils.

The proposed NES outlines a series of minimum requirements for all new pipe water measuring devices:

- Be capable of continuous measurement
- Measure volume in cubic meters
- Have data storage capability
- Have an accuracy standard of ± 5%
- Be capable of recording daily volume
- Be fit for purpose
- Be tamper-proof and sealed.

The additional requirements proposed in this Plan Change are substantially the same as the requirements in the Proposed Natural Resources Regional Plan, with addition of an option for Environment Canterbury to require the provision of the recorded data by telemetry. The requirements also meet the minimum standards of the proposed NES as it is currently drafted. As the suggested amendments are substantial, and technical in nature, it is considered more appropriate to include the technical detail in a schedule at the back of the plan, and refer to this schedule in the standards and terms.

Non-Complying Activity Status

Currently, there is no upper limit on “B” block allocation. A resource consent application can be made to take water in the “B” block allocation as a restricted discretionary activity and if the proposed take does not meet the standards and terms under Rule 5.1, then it is treated as a discretionary activity under section 77C of the RMA.

However, with the proposed introduction of a “B” block allocation of $40m^3s^{-1}$ and a “C” block of $10m^3s^{-1}$, the current rule framework implies only a relatively small difference in activity status should a resource consent application be made to take water over and above the allocation block limits.

It is proposed to amend Rule 5.3 Non-complying Activities to include the taking of water from the Waimakariri River, including surface or from hydraulically connected groundwater within the area of the Waimakariri River Catchment “below Woodstock” when Rule 5.1 is not complied with. It is intended that this will make it clear that allocation of water in excess of the allocation block limit is generally discouraged.

Policy 5.1 Explanation

As a consequence of the amendments to the plan suggested above in relation to the more comprehensive flow and allocation regime for the water resource of the Waimakariri River (including the Kowai River) “below Woodstock, that includes setting allocation block sizes and new minimum flows for these, some additional explanation for Policy 5.1 will assist in plan interpretation.

At this time, any activity that does not meet these flow and allocation regime requirements, by either exceeding the allocation block limits, or by breaching the minimum flow requirements would be considered to be inconsistent with Policy 5.1.

An additional paragraph in the explanation to this effect will provide clarity on this matter.

Planning Maps

Figure 4 and Planning Map 1 of the Plan will be amended to show the correct catchment boundaries of the “below Woodstock” area. The present Figure 4 and Planning Map 1 show some catchment boundaries on the centre-line of rivers, rather than the relevant ridgelines. The amended Map will show the catchment boundaries as the line separating the drainage patterns of adjacent rivers and streams networks, as was always intended.

The changes to Figure 4 and Planning Map 1 are of a technical nature to correct an error, rather than being a substantive change to the administration of water resources.

The Proposed Change:

Deletions are marked as ~~strikethrough~~.

Additions are marked as <u>underline</u>.

1. Rule 5.1 Discretionary Activity for which Environment Canterbury has restricted its discretion

Within the area of the Waimakariri River Catchment "below Woodstock" defined in Figure 4 and Map 1, the taking of water from:

(i) any surface waters of the Waimakariri River or its tributaries; or

(ii) hydraulically connected groundwater[1];

is a discretionary activity for which Environment Canterbury has restricted its discretion.

This rule does not apply to:

(a) the taking of water specified as a permitted activity in the Transitional Regional Plan; or

(b) abstractions from hydraulically connected groundwater where it can be established, using the "Jenkins" method or other scientifically accepted hydrological calculations that the surface water depletion resulting from a 30 day pumping period will not exceed 5 litres per second.

Standards and Terms

The activity shall comply with the following standards and terms:

(a) Fish shall be prevented from entering the water intakes.

~~(b) The taking of water, other than that exempted from the cessation and restriction provisions in paragraph (f) below, shall cease for periods of up to 48 hours upon notice by Environment Canterbury, to allow measurement of the natural water flow, or groundwater levels.~~

~~(c) On the written request of Environment Canterbury, the rate of take shall be measured to within an accuracy of 10% and a log kept of the hours of take and the rate of take. A~~

[1] Hydraulically connected groundwater is groundwater that is laterally connected to a river, with a stream depletion factor less than 100 days calculated using the method published by Jenkins, C T (1977) Computation of rate and volume of stream depletion by wells, in Techniques of Water Resources Investigation of the United States Geological Survey, Chapter D1, Book 4, 3rd Printing. (Note that the taking of groundwater which is not defined as hydraulically connected, and therefore is not affected by the rule, may still need to be authorised by another regional plan or by a resource consent.)

~~copy of the records shall be provided to Environment Canterbury on request by Environment Canterbury.~~

(b) The minimum standards and terms for water measuring and recording devices set out in Schedule 1 shall apply to all new and existing abstractions and out-of-stream diversions authorised by water permits.

(c) For "AA" Permits, the taking of water, downstream of Woodstock, from the Waimakariri River or its tributaries, or from hydraulically connected groundwater shall:

(1) only be for:

(a) reticulated water supplies servicing municipal and urban areas, rural-residential and residential subdivisions, including all commercial and industrial premises and schools and other educational facilities located within the reticulated area;

(b) stock water distribution systems;

(c) augmentation of the Cust River from the mainstem of the Waimakariri River and discharged upstream of Bennetts Road, by up to 230 litres per second, at any time the flow in the Cust Main Drain at Threlkelds Road is at or below 230 litres per second.

(2) whenever the flow is at or below the "Minimum Flow" for "A" permits specified in Table 2, be reduced to no more than provided for in (f) below.

(d) For "A" Permits, the taking of water, downstream of Woodstock, from the Waimakariri River or its tributaries, or from hydraulically connected groundwater shall:

(1) cease whenever the flow ~~"unmodified flow"~~ is at or below the "Minimum Flow" for "A" permits specified in Table 2; and

(2) whenever the flow ~~"unmodified flow"~~ is above the "Minimum Flow" for "A" permits and at or below the "Minimum Flow" for “A” permits plus the “Allocation Limit” for “A” Permits ~~for "B" permits that are~~ specified in Table 2, be reduced to no more than the proportion of the maximum allowable rate of take determined by the following formula:

The flow ~~"unmodified flow"~~ minus the “Minimum Flow” for "A" permits, divided by the “Allocation Limit” for “A” permits.

(e) For "B" Permits, the taking of water, downstream of Woodstock, from the Waimakariri River or its tributaries, or from hydraulically connected groundwater shall:

(1) cease whenever the flow is at or below the "Minimum Flow" for "B" permits specified in Table 2; and~~.~~

(2) if an “Allocation Limit” for “B” permits is specified in Table 2 then whenever the flow is above the "Minimum Flow" for "B" permits and at or below the "Minimum Flow" for “B” permits plus the “Allocation Limit” for “B” permits specified in Table

2, be reduced to no more than the proportion of the maximum allowable rate of take determined by the following formula:

The flow minus the “Minimum Flow” for "B" permits, divided by the “Allocation Limit” for “B” permits.

(ee) For “C” permits, the taking of water, downstream of Woodstock, from the Waimakariri River or its tributaries, or from hydraulically connected groundwater shall:

(1) cease whenever the flow is at or below the "Minimum Flow" for "C" permits specified in Table 2; and.

(2) if an “Allocation Limit” for “C” permits is specified in Table 2, then whenever the flow is above the "Minimum Flow" for "C" permits and at or below the "Minimum Flow" for “C” permits plus the “Allocation Limit” for “C” Permits that are specified in Table 2, be reduced to no more than the proportion of the maximum allowable rate of take determined by the following formula:

The flow minus the “Minimum Flow” for "C" permits, divided by the “Allocation Limit” for “C” permits.

(f) The cessation and restriction provisions in paragraphs (d), (e) and (ee) shall not apply to the taking of water for:

(i) an individual’s needs for the purpose of providing drinking and cooking water and for hygiene purposes, of up to 250 litres per person per day; or for the reasonable needs of an individual’s animals for drinking water;

(ii) a municipal or rural reticulated water supply for the purpose of providing drinking and cooking water and for hygiene purposes, of up to 250 litres per day for every person served by that water supply. For a surface take from the mainstem of the Waimakariri River or where a groundwater take is restricted by virtue of its hydraulic linkage to the mainstem of the Waimakariri River, 350 litres per person per day shall be exempted from restriction rather than 250 litres per person per day. Where a take from a water resource is restricted, but is only one in a number of separate takes servicing a network, then the daily volume of that take which is exempted from restriction, shall be calculated according to the following formula:

P x E x T / TT (where P is the population served by the network, E is the per person per day exemption from restriction, T is the maximum daily volume authorised for that take and TT is the sum of the maximum daily volumes authorised for all of the takes servicing the network);

(iii) Darfield’s and Springfield’s municipal reticulated water supplies, of up to 27% of the maximum daily volume of take authorised by resource consents held by Selwyn District Council; and.

(iv) a reticulated water supply for the purpose of providing drinking water for animals; and

(v) augmentation of the Cust River from the mainstem of the Waimakariri River and discharged upstream of Bennetts Road, by up to 230 litres per second, at any time the flow in the Cust Main Drain at Threlkelds Road is at or below 230 litres per second.

(g) ~~For "A" permits, i~~In the case of abstractions from hydraulically connected groundwater, the cessation and restriction provisions in paragraph<u>s</u> (d)<u>, (e) and (ee)</u> above, apply only above the specified rate of take that would have a calculated effect on the surface water depletion rate, resulting from a 30 day pumping period, that is greater than 5 litres per second.

(h) ~~For "A" permits, t~~The restrictions in paragraph<u>s</u> (d)<u>, (e) and (ee)</u> above, may be achieved by reallocating available water within a "Water Users Group", that limits the combined abstractions from water permit holders in accordance with the restrictions. Where Environment Canterbury has determined there to be a water sharing regime for all water permit holders in a defined catchment or part catchment, then the taking of water in accordance with that determination shall be deemed to be in compliance with paragraph (d) above. Whenever agreement amongst all the permit holders in a catchment or part catchment to operate within a water user group cannot be achieved, then the restrictions on individual takes shall be in accordance with paragraph (d) above. Environment Canterbury will encourage the formation of a “Water Users Group” to implement the water sharing regime.

<u>(i) The taking of water from the Waimakariri River, other than that exempted from the cessation and restriction provisions in paragraph (f) above, shall cease:

(1) upon notice from Environment Canterbury for a specified period of up to 48 hours to allow measurement of the natural water flow, or groundwater levels;

(2) upon notice from Environment Canterbury for a specified period of up to 48 hours to enable floods and freshes to pass without take after a period of low flows which have resulted, in the opinion of the Chief Executive of Environment Canterbury, in nuisance or ecologically harmful algal or weed growth; and

(3) for a period of 24 hours when:

(i) after a period of 21 days within which the flow of the Waimakariri River has not exceeded 80,000 litres per second for a duration of more than 48 hours or 130,000 litres per second for a duration of more than 24 hours; and

(ii) at the commencement of the 24 hour period the flow exceeds 130,000 litres per second.</u>

Interpretation of the Standards and Terms (including Table 2)

Minimum Flow is the flow in the river, as recorded at noon each day and published by Environment Canterbury, below which the taking of water from those water bodies defined by “Water Resource” shall cease. In the case of the Cust River, the "minimum flow" shall be calculated to exclude any water augmenting the river that is exempted in accordance with paragraph (f)(v) of the Standards and Terms.

Site is the location on the river of the gauging site maintained by Environment Canterbury at which the “Minimum Flow" is assessed (see also Figure 5 which indicates the location of the Sites).

“AA” Permits are water permits which are granted to take water until the sum of the individual takes from the “Water Resource” equals the “Allocation Limit” for “AA” permits. No “AA” permits are to be granted above this limit. An "AA" permit remains an "AA" permit on the transfer in whole or part of the permit, provided the same "Allocation Limit" applies to the permit. New permits that are granted as replacements for an “AA” permit on its expiry or review, remain as "AA" permits, where the sum of the rates of take and the allocated volumes of the new permit or permits are not more than that of the original “AA” permit, and provided the same "Allocation Limit" applies to the permits.

“A” Permits are water permits which are granted to take water until the sum of the individual takes from the “Water Resource” equals the “Allocation Limit” for “A” permits. No “A” permits are to be granted above this limit. An "A" permit remains an "A" permit on the transfer in whole or part of the permit, provided the same "Allocation Limit" applies to the permit. New permits that are granted as replacements for an “A” permit on its expiry or review, remain as "A" permits, where the sum of the rates of take and the allocated volumes of the new permit or permits are not more than that of the original “A” permit, and provided the same "Allocation Limit" applies to the permits.

Allocation Limit is the total flow rate of water to be allocated via “AA”, “A”, “B” and “C” permits. In the case of abstractions from hydraulically connected groundwater, the “Allocation Limit” applies only to the calculated stream depletion flow rate, not to the whole rate of groundwater abstracted from the bore or well.

“B” Permits are water permits which are granted to take water once the “Allocation Limit” for “A” permits has been reached and are granted to take water until the sum of the individual takes from the “Water Resource” equals the “Allocation Limit” for “B” permits. No “B” permits are to be granted above this limit. A "B" permit remains a "B" permit on the transfer in whole or part of the permit, provided the same "Allocation Limit" applies to the permit. New permits that are granted as replacements for a “B” permit on its expiry or review, remain as "B" permits, where the sum of the rates of take and the allocated volumes of the new permit or permits are not more than that of the original “B” permit, and provided the same "Allocation Limit" applies to the permits.

“C” Permits are water permits which are granted to take water once the “Allocation Limit” for “B” permits has been reached, and are granted to take water until the sum of the individual takes from the “Water Resource” equals the “Allocation Limit” for “C” permits. No “C” permits are to be granted above this limit. A "C" permit remains a "C" permit on the transfer in whole or part of the permit, provided the same "Allocation Limit" applies to the permit. New permits that are granted as replacements for a “C” permit on its expiry or review, remain as "C" permits, where the sum of the rates of take and the allocated volumes of the new permit or permits are not more than that of the original “C” permit, and provided the same "Allocation Limit" applies to the permits.

Flood is a large event that is sufficient to rework the gravel bed. Floods rework gravel bars and cause branch channels to cut laterally into banks and bars. Floods are needed to maintain the braided characteristic of a river and to remove vegetation growing in the riverbed so that open shingle habitat can be maintained.

Fresh is a period of higher flow, usually marked by dirty water that is sufficient to remove periphyton algae and move the sediment. A fresh helps maintain habitat for invertebrates, and hence the food supply for fish and birds.

~~**"Unmodified flow"** is the rate of flow in the river calculated by Environment Canterbury as if there was no taking occurring. In the case of the Cust River, the "unmodified flow" shall be calculated to exclude any water augmenting the river that is exempted in accordance with paragraph (f) (v) of the Standards and Terms.~~

Water Users Group is as defined in Method 5.3.2

Water Resource is defined as follows (see also Figure 5):

Waimakariri River is the mainstem of the Waimakariri River "below Woodstock", the Kowai River and its tributaries and groundwater which is hydraulically connected to these surface waters, but excluding the Eyre River and its tributaries and groundwater which is hydraulically connected to these, and Saltwater Creek and its tributaries. (Note: The Eyre River and Saltwater Creek are excluded because the taking of water from these rivers has no effect on flows in the mainstem of the Waimakariri River.)

Styx River is the mainstem of the Styx River, its tributaries (but excluding Kaputone Creek), and groundwater which is hydraulically connected to these surface waters.

Kaputone Creek is the mainstem of the Kaputone Creek, its tributaries, and groundwater which is hydraulically connected to these surface waters.

Otukaikino Creek is the mainstem of the Otukaikino Creek, its tributaries, and groundwater which is hydraulically connected to these surface waters.

Courtenay Stream is the mainstem of the Courtenay Stream, its tributaries (but excluding Greigs Drain), and groundwater which is hydraulically connected to these surface waters.

Greigs Drain is the mainstem of Greigs Drain, its tributaries, and groundwater which is hydraulically connected to these surface waters. The most downstream point of the mainstem of Greigs Drain is defined to be at its Minimum Flow Site. Downstream of this Site the surface waters are the Courtenay Stream.

Kaiapoi River is the mainstem of the Kaiapoi River, its tributaries (but excluding the Cam River, Courtenay Stream, Cust Main Drain and Ohoka Stream), and groundwater which is hydraulically connected to these surface waters.

Cust Main Drain is the mainstem of the Cust River downstream of the Cust River Minimum Flow Site until its confluence with the Kaiapoi River, its tributaries (but excluding No. 7 Drain), and groundwater which is hydraulically connected to these surface waters.

Cust River is the mainstem of the Cust River upstream of its Minimum Flow Site, its tributaries, and groundwater which is hydraulically connected to these surface waters.

No. 7 Drain is the mainstem of the No. 7 Drain, its tributaries, and groundwater which is hydraulically connected to these surface waters.

Ohoka Stream is the mainstem of the Ohoka Stream, its tributaries, and groundwater which is hydraulically connected to these surface waters.

Cam River is the mainstem of the Cam River, its tributaries (but excluding North Brook, Middle Brook and South Brook upstream of their Minimum Flow Sites), and groundwater which is hydraulically connected to these surface waters.

North Brook is the mainstem of North Brook upstream of its Minimum Flow Site, its tributaries, and groundwater which is hydraulically connected to these surface waters.

Middle Brook is the mainstem of Middle Brook upstream of its Minimum Flow Site, its tributaries, and groundwater which is hydraulically connected to these surface waters.

South Brook is the mainstem of South Brook upstream of its Minimum Flow Site, its tributaries, and groundwater which is hydraulically connected to these surface waters.

Matters restricting exercise of discretion

Environment Canterbury will restrict the exercise of its discretion when deciding to grant or refuse a resource consent, and in imposing any conditions, to the following matters:

(a) The reasonable need for the quantities of water sought, and the ability of the applicant to abstract and apply those quantities.

(b) The availability and practicality of using alternative supplies of water including alternative public or community reticulated supplies.

(c) In the case of takes from hydraulically connected groundwater:
  (i) the effects the take has on surface water flows including the cumulative effects of the combined take from a person's bore field;
  (ii) the effects the take has on neighbouring bores; and
  (iii) the effects the take has on other authorised takes.

(d) For surface takes:
  (i) the effects the take has on river flows, and consequential effects on those values identified in (a) to (h) of Objective 5.1~~, near the point of take~~;
  (ii) the effects the take has on other authorised takes.

(e) The collection, recording, monitoring and provision of information concerning the exercising of the consent in accordance with Section 108(4) of the RM Act.

Notification

In accordance with Section 94D(2) of the Act, an application for a resource consent required by this rule does not need to be notified, and in accordance with Section 94D(3) of the RM Act, notice of such an application does not need to be served.

In deciding whether or not to notify an application for a resource consent required by this rule, the Council will take into account all relevant considerations, including (but not restricted to):

(1) the volume of the proposed take relative to the <u>allocation regime set out in Table 2</u>~~minimum flow~~;

(2) the ecological sensitivity and/or values of the water body concerned;

(3) the number, volume, and effects on reliability of supply of existing permits; and

(4) possible cumulative effects.

Effect of Rule 5.1 on Existing Resource Consents

This rule shall affect, under section 130 of the RM Act, the exercise of existing resource consents below Woodstock for the taking of water from surface waters of the Waimakariri River or its tributaries or from hydraulically connected groundwater.

When this rule becomes operative, Environment Canterbury may serve notice, under Section 128 of the RM Act, on the holders of all such resource consents of its intention to review the conditions of their resource consent, where in Environment Canterbury's opinion, it is appropriate to do so in order to enable the standards and terms set by the rule to be met.

The holders of resource consents shall comply with the standards and terms of this rule from the date at which the new conditions on their resource consent commence under Section 116 of the RM Act.

For a municipal or rural reticulated water supply scheme, that cannot immediately meet standard and term (f)(ii), the imposition of restrictions may be staged in accordance with a plan provided to Environment Canterbury by the scheme providers to upgrade the scheme, so that it complies within 10 years of this Plan becoming operative.

2. Policy 5.1 Explanation

Add a new paragraph at the end of the explanation for Policy 5.1 as follows:

"Any activity for the taking or diverting of water that does not meet the flow and allocation regime requirements set out in Table 2, by either exceeding the allocation block limits, or by breaching the minimum flow requirements, would be considered to be inconsistent with Policy 5.1."

3. Method 5.3.3 Investigations

Add a new paragraph to the methods investigations as follows:

"In conjunction with the water user group and other interested stakeholders, Environment Canterbury will instigate a project of environmental monitoring to specifically measure the effectiveness of the new environmental flow and allocation regime for the water resource of the Waimakariri River (including the Kowai River) "below Woodstock" in meeting the requirements of Objective 5.1. Particular emphasis will be placed on determining whether

the regime does ensure periphyton growth is removed sufficiently to protect the life-supporting capacity of the river.

Table 1 **MINIMUM FLOWS ~~FOR "A" AND "B" WATER PERMITS WITHIN THE WAIMAKARIRI RIVER CATCHMENT~~ AND ALLOCATION LIMITS ~~FOR "A" PERMITS~~ WITHIN THE WAIMAKARIRI RIVER CATCHMENT.**

Water Resource	Allocation limit in litres per second for "AA" Permits	Minimum flow in litres per second for "A" Permits	Allocation limit in litres per second for "A" Permits	Minimum flow in litres per second for "B" Permits	Allocation limit in litres per second for "B" Permits	Minimum flow in litres per second for "C" Permits	Allocation limit in litres per second for "C" Permits	Site where minimum flow assessed (see Figure 5)	Map reference of site
Waimakariri River (including the Kowai River) "below Woodstock"	5126	41000	22000	~~63000~~ 93000 from 1 September to 30 April 63000 from 1 May to 31 August	40000	133000 from 1 September to 30 April 103000 from 1 May to 31 August	10000	~~Old Highway Bridge~~ Otarama	~~M35:818-547~~ L34:244-717
Styx River	Nil	1200	800	2000	No Limit	N/A	Nil	Radcliffe Road	M35:817-491
Kaputone Creek	Nil	150	180	330	No Limit	N/A	Nil	Confluence with Styx River	M35:824-495
Otukaikino Creek	Nil	2000	1000	3000	No Limit	N/A	Nil	Dickeys Road	M35:804-524
Courtenay Stream	Nil	260	140	400	No Limit	N/A	Nil	Main North Road	M35:813-560
Greigs Drain	Nil	150	70	220	No Limit	N/A	Nil	Greigs Drain Road	M35:805-548
Kaiapoi River	Nil	600	1000	1600	No Limit	N/A	Nil	Neeves Road	M35:796-568
Cust Main Drain	Nil	230	690	920	No Limit	N/A	Nil	Threlkelds Road	M35:783-606
Cust River	Nil	20	290	310	No Limit	N/A	Nil	Rangiora-Oxford Road	M35:661-660
No. 7 Drain	Nil	60	130	190	No Limit	N/A	Nil	Main Drain Road Culvert	M35:781-608
Ohoka	Nil	300	500	800	No Limit	N/A	Nil	Confluence	M35:803-591

Stream								with Kaiapoi River	
Cam River	Nil	1000	700	1700	No Limit	N/A	Nil	Youngs Road	M35:801-633
North Brook	Nil	530	200	730	No Limit	N/A	Nil	Marsh Road	M35:795-649
Middle Brook	Nil	60	30	90	No Limit	N/A	Nil	Marsh Road	M35:782-647
South Brook	Nil	140	100	240	No Limit	N/A	Nil	Marsh Road	M35:779-647

~~Note: The total authorised peak allocation from each water resource at the date of preparing this Plan is shown in Table 1.~~

Rule 5.3 Non-complying Activities

(1) Within the area of the Waimakariri River Catchment "above Woodstock" defined in Figure 4 and Map 1:

(a) the taking of water from the Waimakariri River or its tributaries, including lakes, or from hydraulically connected groundwater;

(b) the "use" of any water in tributaries, including lakes and wetlands, of the Waimakariri River;

(c) the diversion of water from, or the discharge of water into, the Waimakariri River or its tributaries, including lakes and wetlands;

is a non-complying activity.

(2) Within the area of the Waimakariri River Catchment "below Woodstock" defined in Figure 4 and Map 1, the taking of water that does not meet the standards and terms for Rule 5.1 and is not listed as a discretionary activity is a non-complying activity.

~~This~~These rules ~~does~~ not apply to:

(a) taking, "uses," diversions or discharges which are specified as permitted activities in the Transitional Regional Plan; or

(b) activities prohibited by Rule 5.4 in Chapter 5 of this Plan.

Effect of Rule 5.3 on Existing Resource Consents

This rule does not affect the exercise of existing resource consents for the taking "use", diversion, or discharge of water.

Schedules

Schedule 1 Standards and terms for water measuring and recording devices

(1) Minimum requirements for all water flow measuring devices:

(a) All water flow measuring devices shall:

(i) have an international accreditation or equivalent New Zealand calibration endorsement for use with an electronic recording device;

(ii) be capable of continuous measurement;

(iii) measure rate in litres per second, and cumulative volume in cubic metres, of the entire flow with no fittings or obstructions that may create turbulent flow conditions;

(iv) have the capability to be connected to a data storage device such as a datalogger;

(v) be installed and maintained in accordance with the manufacturer's instructions, and maintained in accordance with industry best practice at all times;

(vi) be capable of running reliably on alternative power sources, where mains power is not available;

(vii) be capable of operating in 0 to 95% relative humidity, -15 to +50 0C, and be sealed to prevent condensation;

(viii) be secure against data loss from lightning strike or power surge;

(ix) be tamper-proof and sealed, and designed to show signs of tampering and malfunction;

(x) be accessible to Environment Canterbury staff or representatives at all times for inspection.

(b) In addition to the standards and terms in (1)(a), all water measuring devices where water is conveyed via a pipe shall:

(i) have a straight rigid length of pipe at least 10 times the diameter of the pipe on the intake side of the measuring device, and at least five times the diameter of the pipe on the discharge side of the measuring device, Where this requirements cannot be met, these pipe lengths may be reduced to five and two times the diameter of the pipe respectively, where it can be independently verified that the measuring device can comply with the requirements of (1)(a) and (1)(b)(ii);

(ii) be capable of measuring the rate and volume of water taken precisely to within an accuracy of +/- 5% under field conditions at a location that will ensure the total take of water is measured;

(iii) be recalibrated if necessary to accord with (1)(a)(i) whenever:

a. parts are replaced;

b. requested by Environment Canterbury; and

c. within five years of installation or any previous recalibration test.

(c) In addition to the standards and terms in (1)(a), all water measuring devices where water is conveyed via an open race, drain or stream shall:

(i) continuously and precisely measure water levels to within an accuracy of +/- 3 mm for takes and out-of-stream diversions via a stilling well type of recorder that are more than minor, and/or for which telemetry capability is required immediately or in the future, and +/- 5 mm for all other takes and out-of-stream diversions, in conjunction with a control structure and bed control unless determined otherwise;

(ii) be capable of precisely measuring the net take or out-of-stream diversion to within an accuracy of +/- 10% under field conditions;

(iii) be maintained in accordance with the original standards established when the device was first installed; and the consent holder shall also:

(iv) maintain a rating curve to convert water levels to flow in accordance with current best practice;

(v) provide Environment Canterbury with reasons in writing where any gauging do not fall within 8% of the rated flow, and in addition, have a suitably qualified and experienced person undertake a site review to determine if the rating has changed where such variation occurs on a regular basis;

(vi) provide Environment Canterbury with a copy of the rating curve, including any changes, and all gauging cards, with all data having been processed by a suitably qualified and experienced person, at the frequency specified in any consent conditions, or as notified in writing by Environment Canterbury, but of no lesser frequency than every 12 months;

(vii) fit a data logger in accordance with (2) to store the water-level data;

(viii) inspect the measuring site at least monthly, to ensure that the device is functioning as intended, and is not being affected by the build-up of

weed, debris or natural materials, and record in a log kept for the purpose details of the date and time of such inspections, and any action taken that may affect the accuracy and precision of the measurements.

(d) In addition to the standards and terms in (1)(a) and (c), where water is conveyed via an open race, drain or stream, but measured in a pipe or culvert, the consent holder shall:

(i) have the measuring device installed so that it measures the depth of water in the structure being the entire flow of water in the watercourse;

(ii) have the flow of water exiting the pipe or culvert gauged by a suitably qualified person at a stable site immediately downstream at the frequency specified in any consent conditions, or as notified in writing by Environment Canterbury, but of no lesser frequency than is sufficient to ensure that the flow is being precisely measured within the accuracy specified in (1)(c)(ii);

(iii) ensure that the suitably qualified person measuring the flow in accordance with (1)(d)(i) verifies that the flow device depth offset calibration is checked to ensure that the depth of water is being precisely measured within the accuracy specified in (1)(c)(ii);

(e) In addition to the standards and terms in (1)(a) and (c), where water is conveyed via an open race, drain or stream, but measured using a pre-calibrated control structure such as a weir or flume, the consent holder shall:

(i) have the device installed so that the entire flow passes over or through the structure;

(ii) have the flow of water over the control structure gauged by a suitably qualified person at a suitable site in the immediate vicinity (generally downstream), at the frequency specified in any consent conditions, or as notified in writing by Environment Canterbury, but of no lesser frequency than is sufficient to ensure that the flow is being precisely measured within the accuracy specified in (1)(c)(ii);

(f) In addition to the standards and terms in (1)(a) and (c), where water is conveyed via an open race, drain or stream, but measured using a natural control or un-calibrated control structure, the consent holder shall:

(i) have the device installed so that the entire flow passes over the structure;

(ii) have the flow of water over the control structure gauged by a suitably qualified person at a stable site immediately downstream at the time of installation, and then at the frequency specified in any consent conditions, or as notified in writing by Environment Canterbury, but of no lesser frequency than is sufficient to ensure that the flow is being precisely measured within the accuracy specified in (1)(c)(ii).

(2) Minimum requirements for all water recording devices

All water recording devices shall:

(a) record or log the pulse totals at the period specified in the consent conditions, but not less than once every 15 minutes for surface water takes and out-of-stream diversions, and not less than once every 60 minutes for groundwater takes;

(b) be set to wrap the data from the measuring device(s) such that the oldest data will be automatically overwritten by the newest data (i.e. cyclic recording);

(c) store at least 12 months of data which shall not be deliberately changed or deleted;

(d) be accessible to Environment Canterbury staff or representatives at all times, and able to be retrieved;

(e) record data in accordance with any consent conditions, or as requested in writing by Environment Canterbury;

(f) be installed and maintained in accordance with the manufacturer's instructions, and maintained in accordance with industry best practice at all times;

(g) be capable of running reliably on alternative power sources, where mains power is not available;

(h) be capable of operating in 0 to 95% relative humidity, -15 to +50 0C, and be sealed to prevent condensation;

(i) be secure against data loss from lightning strike or power surge;

(j) be tamper-proof and sealed, and designed to show signs of tampering and malfunction;

(k) be connected to a telemetry system which collects and stores all of the data continuously with an independent network provider who will make that data available in a commonly used format at all times to Environment Canterbury and the consent holder, when required in accordance with any consent conditions, or when requested in writing by Environment Canterbury