

**BEFORE THE INDEPENDENT COMMISSIONERS**

**UNDER** the Resource Management Act  
1991

**IN THE MATTER** of the proposed Canterbury Land  
and Water Regional Plan

---

**STATEMENT OF EVIDENCE OF SANDRA MCINTYRE  
ON BEHALF OF NGĀ RŪNANGA OF CANTERBURY, TE RŪNANGA O NGĀI  
TAHU AND NGĀI TAHU PROPERTY LIMITED**

**4 February 2013**

---

---

**ANDERSON LLOYD**  
LAWYERS  
CHRISTCHURCH

Solicitor: J M Crawford/ B McAuley

18a Birmingham Drive  
Middleton  
PO Box 13831  
CHRISTCHURCH 8141  
Tel 03 379 0037  
Fax 03 379 0039

## 1. INTRODUCTION

- 1.1 My name is Sandra Jean McIntyre.
- 1.2 I currently work with Schema Limited as a planning, policy and project management consultant.

### **Qualifications and Experience**

- 1.3 I hold a Bachelor of Horticultural Science degree from Massey University and a M.Sc in Resource Management (with Honours) from the University of Canterbury.
- 1.4 I have more than 25 years' experience in resource management planning and policy development at district, regional and central government levels. I have been involved in development of both district and regional plans, including preparation and review of section 42A officer reports for the Canterbury Natural Resources Regional Plan in 2007 and 2008. I was also a Senior Adviser for the Ministry for the Environment in development of water management policy as part of the Sustainable Water Programme of Action in 2004 and 2005. I was District Planner at the Dunedin City Council from 1998 to 2004.
- 1.5 I am familiar with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note and I agree to comply with the Code. This evidence is within my area of expertise except where I state that I am relying on information provided by another party. I have not knowingly omitted to consider material facts known to me that might alter or detract from the opinions expressed.

### **Scope of Evidence**

- 1.6 I have been asked by Te Rūnanga o Ngāi Tahu ('Te Rūnanga') to prepare planning evidence in relation to matters raised in its submission to the Proposed Land and Water Regional Plan ('the pLWRP'). My evidence addresses parts 1 to 14 of Te Rūnanga's submission; Ms Lynch will address parts 5 and 16 (minor changes to rules). The structure of my evidence generally follows that of the

submission, except that I have grouped some closely related topics together. The matters discussed are as follows:

- a. An overview of the principles underlying the submission
- b. Plan structure and scope of sub-regional sections
- c. Objectives and strategic policies (including policy on mixing of waters)
- d. Discharges (non-point source and direct)
- e. Management of abstraction (including transfer of permits)
- f. Protection of braided rivers and wetlands
- g. Effects of specific activities
- h. Definition of terms
- i. Further submissions

For each matter, I have identified the relevant submission points addressed (as coded in the Summary of Decisions Requested).

1.7 In preparing this evidence I have reviewed:

- a. The submission of Te Rūnanga o Ngāi Tahu and Ngā Rūnanga of Canterbury
- b. The Proposed Regional Land and Water Plan
- c. The Canterbury Regional Policy Statement
- d. The National Policy Statement on Freshwater Management
- e. The Canterbury Water Management Strategy Strategic Framework
- f. The Canterbury River Gravel Management Strategy
- g. Evidence of Dr Phillippe Gerbeaux for the Director-General of Conservation concerning wetlands

## 2. OVERVIEW OF PRINCIPLES UNDERLYING SUBMISSION

2.1 The submission, although covering a wide range of plan provisions, derives largely from three principles espoused by Te Rūnanga o Ngāi Tahu. These principles are: land and water should be managed in an integrated way; kaitiakitanga should be exercised when managing resources; and a clear and consistent policy framework is needed to guide plan administrators and users. I will consider these principles briefly before proceeding to discuss the detail of the submission.

### **Integrated management**

2.2 As discussed by other witnesses, Te Rūnanga's particular concern about integrated management relates to the concept of ki uta ki tai, which considers all parts of a water resource as a single system from the head of the catchment to the sea. In the submission, this is reflected in requests for reconfiguration of sub-regional sections to align with catchment boundaries, and for greater recognition of connections between surface water and groundwater and between the quantity and quality of freshwater resources.

2.3 The regional council has a general duty under the RMA to provide for integrated management of natural and physical resources (section 30(1)(a)), and the National Policy Statement for Freshwater Management (Part C) specifically requires a 'whole catchment' approach that considers the interactions between freshwater and land use. The National Policy Statement also recognises the need to have regard to the connections between water bodies (Policies A1(a)(ii) and B1(b)).

2.4 These requirements are incorporated into the Canterbury Regional Policy Statement ('the CRPS') in Objective 7.2.3, which recognises the need to consider the ethic of ki uta ki tai, connections between surface water and groundwater and the relationship between land use and water quality in pursuing integrated management of freshwater resources.

2.5 Policy 7.3.9 of the CRPS requires regional plans to include integrated catchment-based management. The principle of integrated

management is also incorporated into the Canterbury Water Management Strategy ('the CWMS'), although this strategy is implemented through water management 'zones' which only sometimes align with catchment boundaries. The relationship between the CWMS and the pLWRP is discussed in paragraph 3.9 below.

### **Kaitiakitanga**

- 2.6 The ethic of kaitiakitanga and its practical implications have been described by other witnesses. In brief, exercise of kaitiakitanga provides for resources to be used for the range of purposes that support economic, social and cultural wellbeing, but in a way that respects and works with the environment in which it takes place, ensuring that the resources will continue to be sustained and enhanced for future use. It is concerned with both management process and management outcomes. The concept of mauri is an integral part of kaitiakitanga, but Te Rūnanga prefers use of kaitiakitanga rather than mauri in the regional planning context, as explained by others.
- 2.7 The submitter has requested that specific attention be paid to kaitiakitanga in the objectives of the pLWRP. The principle is also reflected in requests for a greater focus on the effects of activities in some policies and rules, and in requests for stronger provision for environments that are at risk (specifically over-allocated water bodies, braided rivers and wetlands).
- 2.8 The RMA specifically identifies kaitiakitanga as a matter that must be had particular regard to (section 7(a)). In my view the requirements of kaitiakitanga, as articulated by Te Rūnanga, are also closely aligned to the purpose of the Act as described in section 5.
- 2.9 The National Policy Statement for Freshwater Management makes no reference to kaitiakitanga, but the CRPS identifies this as needing to be considered in integrated management of freshwater resources (Objective 7.2.3).

### **Clear and consistent policy framework**

- 2.10 Te Rūnanga has requested a number of changes to objectives and policies to ensure that individual provisions and the relationships between provisions are clear, that policies are targeted towards achieving objectives, and that the policy framework is consistently applied across the region.
- 2.11 Clarity is important to avoid ambiguity and confusion and to ensure that users understand the rules and the reasons for restrictions applied. Confusion in interpretation of objectives, policies and rules increases compliance costs for resource users as well as costs for submitters and for the Council in administering the plan.
- 2.12 The RMA section 32 tests require clear links between objectives, policies and rules. Poorly expressed or weak relationships make it difficult to assess whether the policies and methods in a plan are the most appropriate and, ultimately, to determine whether they are effective in achieving the desired outcomes.
- 2.13 Consistency across the region, and across activities with similar effects, is important both for reasons of equity and to ensure that objectives are not undermined.

## **3. PLAN STRUCTURE AND SCOPE OF SUB-REGIONAL SECTIONS**

### **Content of sub-regional sections (submission point 358.87)**

- 3.1 The pLWRP approach of using both region-wide and catchment-specific provisions has potential to enable overall integrated management, applying consistent outcomes, priorities and policy direction across the region, while also recognising and providing for the different physical characteristics, values and uses of various water bodies and their catchments in implementation of the policy framework.
- 3.2 To ensure that this approach succeeds in achieving integrated management, catchment-specific provisions must be developed within a clear and consistent context, provided by the region-wide objectives and policies. The direction of catchment-specific provisions needs to be

consistent with the overall policy direction and the environmental 'bottom lines' for management of freshwater cross the region. It should not be necessary for communities and stakeholders to re-litigate these for each catchment; this would be inefficient and could lead to inconsistent treatment of similar effects, inhibiting achievement of the plan's objectives.

- 3.3 It is important that the scope of catchment-based provisions within the region-wide framework is clear, in order to avoid confusion about what parts of the plan apply in any particular situation. If the scope is ill-defined, there is also a risk that this will gradually expand in some or all of the sub-regional sections, resulting in the loss of cohesion, integrated management and overall integrity of the plan.
- 3.4 Te Rūnanga has requested that catchment-specific provisions should be confined to allocation regimes and limits relating to water quality and quantity. I consider that it would also be appropriate for their scope to include the other matters currently indicated by sub-headings within the sections - that is, flow-sensitive catchments and high naturalness water bodies. It might also be appropriate to include identification of outstanding values of water bodies that do not, as a whole, meet the 'high naturalness' threshold. These provisions all recognise and reflect the particular characteristics of the water body and catchment.
- 3.5 It may be appropriate to have some specific policies and rules in sub-regional sections relating to the allocation regimes and limits and how they will be applied, but these must be consistent with region-wide policies. Any departure from the region-wide policies could lead to conflict between regional and catchment approaches. As well as creating confusion, this could lead to inconsistency in treatment of similar effects in different parts of the region and would not provide for integrated management.
- 3.6 Te Rūnanga has not suggested any specific wording to give effect to its request. I consider it would be appropriate to amend the second paragraph of Section 2.4 to specify scope and clarify that any policies and rules in sub-regional sections will be subsidiary to and will apply in addition to (rather than instead of) policies in Section 4, as follows:

*The sub-regional sections contain policies and rules which are specific to the catchments covered by that section. The scope of policies and rules in the sub-regional sections is confined to implementation of allocation regimes and other water quality and quantity limits in the areas specified and identification of catchments, water bodies or outstanding values that require special protection. The policies and rules apply instead of, or in addition to, policies and rules in the region-wide section. They implement the region-wide objectives in the Plan in the most appropriate way for the specific catchment or catchments covered by that section.*

- 3.7 The section 42A report suggests (page 73) that changing the scope of sub-regional sections would require a significant change in the way the plan is drafted and would lead to debate about “how or whether CWMS Zone Committee outcomes could be achieved through the sub-regional sections”. I do not agree, insofar as the scope requested by Te Rūnanga is concerned. The requested scope is already implied in the current content of the subsections, and making this explicit should remove any potential for confusion about the components of CWMS outcomes that can be appropriately incorporated.

**Boundaries of sub-regional sections (submission points 358.88 - 358.89)**

- 3.8 As discussed above, provisions in sub-regional sections are related to specific catchment and water body characteristics. To reflect this, Te Rūnanga requests that sections be reconfigured to align with catchment boundaries, consistent with the ethic of ki uta ki tai.
- 3.9 Currently, sections are based on the boundaries of management zones established in the CWMS. In developing the pLWRP, the Council must have particular regard to the vision and principles of the CWMS. However, in considering how these should be translated into the context of the pLWRP, it is important to recognise that the CWMS is primarily a vehicle for communities and stakeholders to collaborate in determining desirable outcomes for water bodies. Because it is based on community participation, it is appropriately constructed around



communities of interest. Although the community outcomes and other matters agreed through CWMS processes provide a key contribution to formulation of catchment management regimes in the pLWRP, it is not necessarily appropriate that these regimes should simply duplicate the content of Zone Implementation Plans. The pLWRP is a vehicle for achieving the purpose of the RMA and any contribution from CWMS processes must be included in a way that is consistent with this. This relationship is clearly explained in Section 7 of the CRPS (page 50).

- 3.10 As discussed in paragraphs 2.3 to 2.5, the statutory documents produced in accordance with the RMA promote management that is aligned with catchments. Dr Wilcock and Mr Duncan have described why it is desirable for allocation regimes and limits to align with catchment boundaries, and the problems that can arise if inconsistent regimes are imposed in different parts of the same catchment.
- 3.11 While careful attention to the task may ensure there is initial consistency throughout a catchment to begin with, if the catchment is split between sub-regional sections progressive plan changes over time may dilute and undermine this consistency. The boundaries of the sub-regional section, rather than of the catchment, will be the predominant influence on the direction of changes over time.
- 3.12 Sections that apply limits and allocation regimes across several catchments, rather than splitting catchments, are less problematic in terms of integrated management. However it is likely that the regime imposed will not suit the characteristics of all affected catchments equally well, unless there are very strong similarities in the physical character, values and uses of the catchments.
- 3.13 I consider that reconfiguration of sub-regional section boundaries to align with catchment boundaries, as requested by Te Rūnanga, would enable the plan to be more effective in achieving integrated catchment management. It could be argued that there is scope within the current process to adjust boundaries, provided that existing provisions are incorporated into the revised sections in a way that ensures they apply to the same geographic areas to which they apply now. However reconfiguration of boundaries should also properly include a review of the appropriateness of the current provisions in the new context. This

would require a variation, and I consider it would be appropriate for the Hearing Panel to recommend this to Environment Canterbury.

- 3.14 The submission identifies particular concerns about Section 12 of the pLWRP (Central Canterbury Alpine Rivers). This section combines the upper catchments and main stems of four rivers, but excludes the lower catchments. Concerns about Section 12, and specific concerns about other sub-regional sections will be addressed in the Group 3 hearing.

#### 4. **OBJECTIVES AND STRATEGIC POLICIES**

##### **Objectives (submission points 358.94 – 358.107, 358.191 – 358.209)**

- 4.1 Objectives in any plan should be clear, specific, measurable and achievable. These attributes are important to ensure the intent of the plan is easily understood, that policies and implementation methods are appropriately targeted and that the effectiveness of the plan can be monitored.
- 4.2 The approach taken in the pLWRP is to have simple statements of objectives, focused on environmental (including social, economic and cultural) outcomes. This is primarily a response to criticism of long and complex provisions in the NRRP. However simplification must be approached with care to ensure that the provisions retain sufficient guidance for people using and administering the plan. Because explanations are not included in the plan to aid interpretation, clear wording of objectives is crucial. In some cases, it is appropriate to sacrifice a degree of brevity for the sake of clarity and specificity.
- 4.3 In general, outcomes sought are clear, but simplification means that it is not always clear how these should be interpreted or how they relate to each other. In particular, where there is potential for conflict between objectives for protection of instream values and provision for resource use, there is no guidance as to how the conflict should be addressed. The section 42A report authors (page 97) comment that the expressed requirement to consider all objectives together “will generally provide the required balance”. I think that some clear guidance as to how the

objectives should be seen in relation to each other will assist this balance to be achieved with more consistency between decisions, and less time and cost expended in debate. I also consider that clarifying the relationship between objectives is consistent with the approach taken in section 5 of the RMA, which establishes a relationship between its parts by use of the word 'while'.

- 4.4 The section 32 report states that many of the objectives are 'aspirational' or outside the regional council's control rather than being able to be achieved as a result of provisions in the pLWRP (Objectives 3.1, 3.3, 3.5, 3.7, 3.15, 3.16, 3.21, 3.23). The pLWRP is a vehicle intended specifically to enable the Council to manage resources in accordance with the RMA. Objectives should relate to what the Council can practically influence by its management; 'aspirational' statements of desirable community outcomes would more appropriately sit in a community vision statement.
- 4.5 Te Rūnanga has requested various changes to make the objectives and their relationships clearer, to ensure they focus on what is achievable through implementation of the plan, and to give greater emphasis to the principles of integrated management and kaitiakitanga. Because of the focus on relationships, the requested amendments re-order and regroup some of the objectives. This makes it difficult to properly compare the two sets of objectives by matching them against each other individually. To assist the Hearing Panel, I have attached a table (Annexure A) matching the requested objectives to the equivalent groups of pLWRP objectives.
- 4.6 My evaluation of the key components of the requested amendments follows. In general, I consider that the wording requested by Te Rūnanga is appropriate and makes the objectives clearer and easier to interpret. In some instances I have suggested modifications to further improve clarity, and these are also shown in Annexure A.
- 4.7 Objectives 3.2 and 3.4, which appear to overlap significantly, are combined into a single integrated management objective (Objective 1). The change is primarily for clarification, although the submitter has also included a clause to reflect the cultural imperative for integrated management. I have suggested this be removed, as it is duplicated in

other objectives and the reference to the concept of ki uta ki tai is sufficiently clear without it. I note that Recommendation R3.0 in the section 42A report deletes reference to ki uta ki tai, although no reason is given for this. Objective 7.2.3 in the CRPS specifically requires consideration of the ethic of ki uta ki tai in achieving integrated management, and this should be reflected in the pLWRP objectives.

- 4.8 A new objective (Objective 2), in two parts, is requested to provide explicitly for exercise of kaitiakitanga and to provide guidance about what that means in terms of desired 'scientific' outcomes. This objective incorporates the outcomes expressed in Objectives 3.7, 3.8, 3.9, 3.10, 3.13 and 3.14, including provision for the first-order priorities identified in the CRPS (Policy 7.3.4(1)) and the CWMS. In my opinion, the requested Objective 2 is a significant advance in providing guidance about how kaitiakitanga, and the holistic approach it requires, should be interpreted in the context of freshwater management. Combining parts (a) and (b) would make the relationship between the cultural and scientific approach clearer, and I have suggested further amendments to achieve this and to tighten up wording generally.
- 4.9 Te Rūnanga has requested that an explanation of the kaitiakitanga objective be included. Although this would depart from the general format of the plan, this is a matter of style rather than substance, and there is no doubt that an explanation would advance understanding of the concept of kaitiakitanga. However, should the Panel decide that objectives should not be accompanied by explanations, I suggest that it would be helpful to incorporate the bulk of this explanation into the description of kaitiakitanga in Section 1.3.1.
- 4.10 The section 42A report does not discuss the requested objective, but suggests that it is not appropriate to include objectives for process or management approaches (p. 97). As discussed by other witnesses, the ethic of kaitiakitanga encompasses both management approach and outcomes. The purpose and principles of the RMA address both environmental outcomes and approaches to management and there is no clear reason why effective exercise of kaitiakitanga should not be an outcome of the plan, particularly given the weight it is accorded in the RMA.

- 4.11 Objectives providing for use of the freshwater resource, as well as land use that may affect water quality (Objectives 3.11, 3.15, 3.21, 3.22, 3.33) are deconstructed, rearranged and placed into a clear relationship with the kaitiakitanga objective. This emphasises that resource use must operate within limits that safeguard the environment and enable the first-order CWMS priorities to be met. I consider this is more consistent with the purpose of the RMA than some of the existing objectives. In particular, provision for ‘maximum social and economic benefits’ from water abstraction, as expressed in Objective 3.11, does not suggest any potential for compromise to satisfy environmental needs. Reference to Objective 2 as the basis for limitations on land use (in requested Objective 7) is also more closely aligned to the purpose of the RMA than is achievement of CWMS targets (Objective 3.21).
- 4.12 Similarly to the above treatment, Objective 3.20 providing for gravel extraction is reconstructed to emphasise that this activity must operate within environmental constraints.
- 4.13 Further detail is provided in some objectives, notably Objectives 2, 5, 9 and 10, to assist interpretation of the outcomes to be achieved. For example, the broad and arguably vague terms “sustainable” and “wise” in relation to outcomes from water storage in pLWRP Objective 3.15 are given specific and clear definition in Objective 9.
- 4.14 A stronger focus is placed on protection of sensitive environments and outstanding values that are at particular threat:
- a. protection of natural character values is expanded from a focus solely on alpine rivers (pLWRP Objective 3.9) to a broader range of water bodies. This is more consistent with section 6(a) of the RMA and better gives effect to CRPS Policy 7.3.1, concerning adverse effects on natural character values and Policy 7.3.2, providing for maintenance of the natural character of braided rivers (this is discussed further in section 7 of my evidence);
  - b. wetlands are accorded broader protection in Objective 4 than in PWLRP Objective 3.6. This better gives effect to Objectives A2 and B4 in the NPS and to CRPS Policies 9.3.5 (wetland

protection and enhancement) and 11.3.6 (role of natural features in avoidance or mitigation of natural hazards);

- c. Objective 5 clarifies that outstanding water bodies (pLWRP Objective 3.5) may include outstanding characteristics and values of water bodies that are not in a fully 'natural' state, and also explicitly protects unmodified lakes and main stems of rivers.

4.15 Among the amendments requested, Te Rūnanga has asked for deletion of Objective 3.16. Ngāi Tahu Property Limited, in its submission, has taken a position that differs from this. The objective, in its present form, provides for significant infrastructure without reference to the need to operate this within limits to manage its effects, but does not provide any recognition at all for other existing infrastructure, which has similar requirements in regard to certainty for continued operation and maintenance. Policy 7.3.11 in the CRPS provides for continuation of existing infrastructure generally, but requires improvements in water use efficiency and reduction in adverse environmental effects. I consider that it would be appropriate to include an objective that reflects the CRPS objective, and have suggested wording to achieve this (see Annexure 1).

4.16 The section 42A report recommends some amendments to pLWRP objectives but does not provide any specific explanation of the reasons for these. This makes it difficult to evaluate the merit of the recommendations. Some of the wording requested by Te Rūnanga has been adopted. However this has not always been done in an appropriate context. In particular, the request of Te Rūnanga for deletion of Objective 3.7 concerning the mauri of water bodies has been accepted without reference to the context of this request, which was related to inclusion of the more comprehensive Objective 2 providing for exercise of kaitiakitanga. Failure to consider the submission as a whole has resulted in a set of recommended objectives that do not recognise either mauri or kaitiakitanga. This fails to provide for a matter recognised in section 7 of the RMA and does not give effect to Policy D1(c) in the NPS or Objective 7.2.3 in the CRPS.

**Strategic policies (submission points 358.108 – 358.116, 358.210 – 358.215)**

- 4.17 The submitter's concerns about the strategic policies are similar to those about the objectives - in particular, that relationships between policies and to objectives are not clear, and that the policies do not adequately incorporate the principles of integrated management and kaitiakitanga. As in the case of the objectives, Te Rūnanga has deconstructed and rearranged some of the policies. Annexure 2 shows the requested amendments alongside equivalent pLWRP policies. In general, I support the requests, but have suggested some minor refinements as indicated in Annexure 2. The various requests are discussed below.
- 4.18 Policies 4.1 to 4.7 are restructured to make the respective roles of sub-regional limits and Table 1 outcomes clearer, to link these to the requested objectives for integrated management (Objective 1) and kaitiakitanga (Objective 2) and to specifically consider surface water and groundwater, quality and quantity together. The requirement for resource consents to meet limits or Table 1 outcomes is strengthened, with provision for a consent to be granted above limits only if it is linked to a plan to reduce over-allocation. There is an explicit obligation, in the requested Policy 4.1, for sub-regional limits to give effect to the region-wide bottom lines and first order priorities expressed in Objective 2.
- 4.19 As discussed in Section 3 of my evidence, I believe consistency of catchment regimes with region-wide objectives is important to ensure integrated management and to protect the integrity of the plan. I consider that the requested amendments improve clarity in the description of the approach to be taken for freshwater management and the relationships between the various components. The restrictions on granting of consents for over-allocated resources in the requested Policies 4.3 and 4.4 are more consistent with the requirements of the NPS (Policy A1(b) and Objective B2) to avoid over-allocation than the looser wording in either the pLWRP Policies 4.6 and 4.7 or the amendments to Policy 4.6 proposed in the section 42A report (Recommendation R4.6).

- 4.20 In response to submitters on pLWRP Policy 4.1, the section 42A report recommends (Recommendation R4.1) that timeframes be specified within which water bodies must meet relevant outcomes set in sub-regional sections or Table 1. I support the idea of requiring clear timeframes, but think that incorporating them into Te Rūnanga's amended policies 4.1 and 4.5 would more clearly link them to the management approach which is being adopted to meet the targets.
- 4.21 An amendment has been requested to pLWRP Policy 4.5 to include research and customary uses among the provisions for damming, diverting and taking water in high naturalness water bodies. The basis for this request has been discussed by other witnesses. I consider that provision for customary use would be appropriate and consistent with section 6(e) of the RMA. Research activities in high naturalness water bodies may also be desirable if the research is intended to support maintenance or enhancement of the natural and cultural values associated with the water body. However 'research purposes' are not defined and could potentially include activities with significant effects. To avoid this, the provision should only be included if its scope can be confined within reasonably tight bounds. I suggest the following (or similar) wording:
- "to support customary uses or to enable research supporting maintenance or enhancement of the water body's natural or cultural values ..."*
- 4.22 The submitter also requests that provision for infrastructure in Policy 4.5 be limited to existing infrastructure. I consider this is appropriate to ensure the natural character of these water bodies is maintained, and I note that acceptance of this request has been recommended in the section 42A report.
- 4.23 Te Rūnanga supports the intent of pLWRP Policy 4.8, but seeks that the policy be amended to ensure that CWMS proposals and priority outcomes are set in a proper relationship to the scope of regional plan contents and the purpose and requirements of the RMA, by incorporating them into the sub-regional sections. I have discussed the relationship between the CWMS and the plan in paragraph 3.9 above, and I consider that the approach proposed by the submitter provides a



better solution to the challenge of setting the CWMS process outcomes into the RMA framework than the solution recommended in the section 42A report (addition of reference to section 6-15 outcomes at the end of the policy). However a variation is likely to be necessary to incorporate Schedule 16 in the sub-regional sections, since a degree of translation of this into the RMA context would be required. I consider it would be appropriate for the Panel to recommend that Environment Canterbury initiate such a variation.

- 4.24 The submitter requests a further amendment to pLWRP Policy 4.8 to require irrigation proposals to address effects on water quality. The relationship between irrigation and water quality is discussed by Dr Wilcock and inclusion of this amendment would support the requested approach to managing the impacts of land use on water quality, discussed in section 5 of my evidence. I note that the section 42A report does not discuss this part of the submission.
- 4.25 Te Rūnanga requests inclusion of a new policy identifying and providing for cultural landscapes. As expressed in the submission, this policy would fit more obviously within the scope of a district plan than a regional plan. However it would be appropriate to provide, in the regional plan, for cultural landscapes that are a component of the natural character of water bodies. The policy proposed in the section 42A report to replace Policy 4.3 (Recommendation R4.3) would provide for this. I support this recommendation subject to a further amendment to clarify that this includes cultural landscape features that form part of the natural character of water bodies.

#### **Mixing of waters (submission point 358.184)**

- 4.26 Ngāi Tahu concerns about mixing of waters between catchments have been described by other witnesses. This is a significant cultural concern which has not always been respected in management of water in Canterbury in the past. Te Rūnanga wishes to ensure that it is appropriately considered in future, particularly in the context of development of regional infrastructure for irrigation and other uses.

- 4.27 Recognition and provision for the relationship of Ngāi Tahu with water is embedded in the RMA (s. 6(e)) and the National Policy Statement for Freshwater Management (Objective D1). The CRPS includes provisions safeguarding mauri of water bodies (Objective 7.2.1). None of these documents specifically mentions the concerns about mixing of water and it is likely that the nature of these concerns is not well understood by decision-makers.
- 4.28 As identified in the section 42A report (page 255), Policy 4.52 already addresses mixing of waters. However the wording of the policy requested by Te Rūnanga describes the concern more clearly. Moving the policy to sit with the strategic policies would also give it more prominence, reflecting the significance of the concern. I note that both Te Rūnanga and Fish and Game New Zealand, who also requests a new policy, appear to have overlooked the existing policy due to its wording and location.
- 4.29 Te Rūnanga has supported the submission of Fish and Game in regard to this matter. I consider that the policy could be improved and strengthened by incorporating aspects of Fish and Game proposed policy into Te Rūnanga wording, as follows:

*The transfer of water from one catchment or water body to another, either directly or through the discharge of water onto land where it may enter water: ~~as part of any irrigation, hydro-electricity generation or other water infrastructure development~~*

*(a) Will be undertaken in locations and ways which are acceptable to Ngāi Tahu considering the whakapapa of the catchments involved, any potential effects of transferring or mixing waters on the natural character and ecology of the catchment and the effectiveness of any mitigation measures;  
and*

*(b) Will not result in the transfer of fish species, plant pests or unwanted organisms from one catchments to another;  
and*

*(c) Will not result in ~~or~~ any deterioration in water quality in the receiving catchment.*

- 4.30 The submitter has requested an explanation to be included with this policy to provide further guidance. This would assist in improving understanding of the nature of the cultural concern. As with Objective 2, if the Panel wishes to maintain the current format of the plan, the explanation should instead be incorporated into section 1.3.1.

## 5. DISCHARGES

### **Non-point source discharges (submission points 358.117 – 358.144)**

- 5.1 Non-point source discharges to land are well recognised as a contributor to poor water quality in some surface water and groundwater resources, as Dr Wilcock discusses in his evidence. Te Rūnanga supports the intent of the plan in addressing the effects of these discharges, but is concerned that the provisions are not derived from a clear analysis of cause and effect. The submitter considers that, as a result of this, they are not well-targeted, are likely to be inefficient and may be ineffective.
- 5.2 The National Policy Statement for Freshwater Management (Policy C2) requires regional policy statements to provide for integrated management of the effects of the use and development of land on freshwater. Among the measures included in the Canterbury CRPS to give effect to this, Policy 7.3.7 specifically requires that catchments where water quality may be affected by changes in land use are identified in regional plans and that land use changes are managed to maintain water quality standards.
- 5.3 The pLWRP sets out its proposed approach in 11 policies and 11 rules. In brief, this provides for the following:
- a. Nutrient load limits and allowances for specific catchments will be set by plan change; when set, all activities in the catchment must comply with these. Where such a plan change has not been introduced, the 'fall-back' regime will be as described in (b) and (c);

- b. Prior to 2017, all farming activities will be permitted if they record their nitrogen discharges and, for those in a Lake Zone, if they implement a farm environment plan. Defined land use 'changes' will require resource consent unless the activities are subject to a water permit that includes conditions imposing nutrient discharge restrictions. The activity status varies in different parts of the region depending on the current status of water quality indicators, with land use changes in Lake Zones and a 'red' zone where water quality outcomes are not met being non-complying;
  - c. From 1 July 2017, all farming activities will require resource consent unless they meet nitrogen loss limits to be set for the relevant activity. Again, the activity status will depend on the zone in which the activity is located. Any use of land for a farming activity in a Lake Zone will be non-complying;
  - d. The definition of land use 'change' includes the introduction or increase in volume of irrigation, or an increase of more than 10% in loss of nitrogen above the level calculated over the two years to the end of June 2013.
- 5.4 The provisions are inconsistent with CRPS policy in two key respects: the threshold for consent requirement and the way the restrictions have been applied across different parts of the region.
- 5.5 The complex nature of the relationship between land use and water quality has been described by Dr Wilcock. In some areas water quality is clearly being adversely affected by diffuse discharge of nutrients from livestock grazing and from application of fertilisers, but the extent of contribution to the problem from this source depends on multiple factors, and the degree of water quality improvement that may be achieved through controlling land uses varies from catchment to catchment. A catchment-based approach to setting and implementing limits is therefore appropriate. In the absence of this, the types of environment that are particularly sensitive should be identified and controls should be applied to these areas. Identifying areas for control purely on the basis of the status of current water quality indicators assumes the indicators are appropriate for this purpose - that is, that

there is an established cause-effect relationship between nutrient discharge, the state of the indicator, and the desirable water quality outcome. Because the pLWRP and the section 32 report do not clearly specify which indicators, of those listed in Table 1, have been used, it is not possible to confirm this.

- 5.6 The resource consent triggers proposed in the pLWRP regime are, at the same time, too onerous on some land uses and ineffective in addressing the effects of others. I do not generally favour thresholds based on percentage increase in activity because they impose disproportionate compliance costs on small-scale activities with minor effect, but also allow for potentially significant increases in activity in large enterprises, with associated significant effects on the environment. Under the pLWRP regime, there is no regulation of existing activities until 2017 regardless of the magnitude of potential effects, and no incentive for these activities to reduce their nutrient discharges. In fact, there is a perverse incentive in the short term for them to increase these discharges so that the percentage increase allowed before the 'change' definition applies will be calculated from a higher baseline average. Conversely, because the definition applies regardless of the initial scale of the activity, small-scale activities (for example smallholdings that graze a few sheep) will trigger the control with only minor increases in the scale of their activities.
- 5.7 The regime proposed by Te Rūnanga, to apply where catchment limits have not been established, amends the definition of 'change' to base this on a consistent trigger level (the introduction of or increase in irrigation volume, and the absolute rate of nitrogen loss) and sets conditions allowing low impact land uses to be carried out throughout the region. Both existing activities and 'changes' in activity exceeding these thresholds must either comply with nutrient allowances set for the activity (as in the pLWRP regime) or obtain resource consent. Like the pLWRP regime, activity status varies in different parts of the region, but Te Rūnanga proposes a simpler system of two zones, defined on the basis of whether or not land uses are known to be the cause of poor water quality in that part of the region and where there is evidence that intensification will result in degradation of water quality. Where this

is the case, changes in land use will have to meet a more onerous test than continuation of existing activities.

- 5.8 I consider that Te Rūnanga's proposed regime is preferable in terms of targeting activities and areas where effects are likely to occur. It treats existing and developing land uses, and large and small users, equitably by distinguishing only on the basis of the potential significance of effect. It avoids onerous compliance costs being imposed on low impact land uses, but provides greater certainty that activities with potentially significant effects will be assessed and managed to minimise these. It is also simpler and easier for resource users to understand than the current pLWRP regime. The triggers proposed in the 'change' definition are based on current scientific understanding, as Dr Wilcock's evidence discusses.
- 5.9 Delineation of the zones described in Te Rūnanga's submission will require a further process of assessment and consultation, unless there is information available that shows that the indicators and zone boundaries used in the current pLWRP would appropriately translate to the effect-based zones requested. It is unlikely that this is the case, so a variation to the plan would be required to fully implement Te Rūnanga's proposed regime.
- 5.10 I consider it would be appropriate for the Panel to recommend initiation of such a variation to the ECan Commissioners. Until the variation has been developed, I believe it would be appropriate to replace the pLWRP regime with some components of Te Rūnanga's proposal. As part of this, it would be appropriate to allow for a 'grace' period for existing activities to give them time to modify their management practices to meet permitted activity conditions. The interim regime could be implemented by the following:
- a. Replace Policies 4.28 to 4.38 with:
 

*#To require all land uses which involve the non-point source discharge of contaminants to water onto land where it may enter water to take all practicable measures to minimise the amount of potential contaminants discharged.*

*#To manage land uses with non-point source discharges resulting in significant concentrations of contaminants and to ensure any change in land use activities does not result in any increase in the volume of nitrates, phosphates, sediment or other contaminants being discharged from that property, into water.*

- b. Replace rules 5.39 to 5.49 with:

**Rule A1:**

*The use of land and any associated discharge of nutrients from any farming activity is a permitted activity provided it complies with all of the following conditions:*

- (i) The farming activity does not involve irrigation;*
- (ii) Fertiliser (including that drilled into the ground but excluding urine and dung discharged by animals grazing on the property) is not applied to any land area more than twice in any twelve month period;*
- (iii) Any fertiliser application complies with rules 5.52 and 5.53;*
- (iv) Fertiliser is not applied to bare land, except where it is direct drilled into the ground with the sowing of a seed crop;*
- (v) The land area is not used to spread stored effluent;  
and*
- (vi) The land area is not used to graze dairy herds.*

**Rule A2:**

*From 1 July 2017, any existing activity which does not comply with this rule shall comply with the nutrient discharge allowance set for the activity in Schedule 8 or, if no allowance has been set, shall be subject to Rule B.*

**Rule B:**

*Any existing farming activity which does not comply with Rule A1 or A2, and any change in farming activity which does not comply with Rule A1, is a restricted discretionary activity.*

*The consent authority shall restrict its discretion to assessing whether any non-point source discharge of contaminants from the farming activity will either singularly or in combination with other land uses in the catchment, adversely affect existing water quality in the catchment, and the effectiveness of any proposed mitigation measures.*

- c. Amend the definition of 'change' to a farming activity to read:

*(a) The application of irrigation water or an increase in irrigation water; or*

*(b) A change in land use which increases the nitrogen discharged per hectare to over 20/kg/ha/yr, averaged over the farm.*

- 5.11 I have not included, in these recommended amendments, policies requested by Te Rūnanga relating to catchment water quality standards. This is not necessary as their content is already provided for in the strategic policies requested by the submitter, as amended to include timeframes recommended in the section 42A report (see paragraph 4.19 and Annexure 2). However, it would be appropriate to include more specific policy to direct the way in which nutrient discharges will be treated in a catchment for which a nutrient discharge allowance has been established. Te Rūnanga has made a further submission supporting policies on this matter requested by Fish and Game New Zealand (submissions 347.82 – 347.85). I consider a modified version of these policies would be appropriate, as follows:

*# Nutrient discharge allowances which achieve the objectives of this plan will be set for every catchment in the region by [a specified date];*



*# In any catchment which is over-allocated in terms of its nutrient discharge allowance:*

*(a) land uses will not, singularly or cumulatively, result in any further deterioration of the quality of fresh water in the receiving environment; and*

*(b) land uses in the catchment will be subject to a programme and timeframe to reduce the over-allocation so as to meet the standards set for the catchment;*

*# In any catchment which is approaching full allocation of its nutrient discharge allowance, land uses will not, singularly or cumulatively, result in the catchment becoming over-allocated in terms of its nutrient discharge.*

#### **Direct discharges (submission points 358.145 – 358.152)**

- 5.12 As identified in Te Rūnanga's submission and explained by other witnesses, discharge of any contaminants into surface water is culturally offensive to Ngāi Tahu. This offence is related to the transfer of degraded water into natural water bodies and remains despite any treatment applied to the water being discharged. This is a matter that it is relevant to consider in relation to section 6(e) RMA and the exercise of kaitiakitanga (discussed earlier), and also in giving effect to Objective D1 and Policy D1(c) of the NPS (reflecting tangata whenua values in freshwater management) and Objective 7.2.1(1) of the CRPS (regarding safeguarding mauri of fresh water).
- 5.13 It is not practicable to avoid all direct discharges to surface water, at least in the lifetime of this plan. However, given the importance of this matter as a cultural concern, I consider it would be appropriate to have a clear and strong policy framework discouraging such direct discharges and actively promoting alternatives.
- 5.14 The submission requests inclusion of a policy specifying that direct discharges to surface water will be limited to treated stormwater, with existing discharges also allowed to continue for a 'grace' period allowing them to obtain a resource consent for alternative disposal.

Rewording of Policy 4.10 to strengthen the preference for discharge to land or artificial wetland is also requested. The submitter also seeks (in Rule 5.64) prohibition of any new discharges of sewage effluent to surface water, and (in Rules 5.65 and 5.66) removal of provision for overflow of any untreated sewage into water.

- 5.15 The rules of the pLWRP provide for very few discharges to surface water as permitted activities. Discharges are limited to stormwater, water from established land drainage systems, swimming pool water (excluding filter backwash) and incidental discharges of herbicides from weed control on the bed or bank. Discharge of tracers is also provided for as a controlled activity. This implies a policy position that is only a little less restrictive than that requested by Te Rūnanga, but that is not stated explicitly.
- 5.16 The wording of pLWRP Policy 4.10 appears weaker than that proposed by Te Rūnanga. It states a preference for land-based or other treatment prior to rather than in place of discharge to water. While this may be unintended, the consequence is that the policy does not clearly direct users to consider discharges to water only where other solutions are not practicable.
- 5.17 I consider that the policy position could be clarified and strengthened to address Te Rūnanga's concern while also providing for discharges to water that cannot practically be avoided, including incidental herbicide discharges and appropriate use of tracers by the following amendments:

- a. Insert new policy before Policy 4.10 that reads:

*For all other discharges, the first preference is to land or artificial wetland treatment whenever practicable. Limited provision is made for discharges to surface water of:*

*(a) treated stormwater;*

*(b) contaminants (including tracers and herbicides) incidental to work carried out within or immediately adjoining the surface water body; and*

*(c) contaminants subject to a legally authorised discharge prior to this plan being adopted, provided resource consent has been applied for, for an alternative disposal system.*

*Where any discharge to water must occur, it complies with the receiving water standards in Schedule 5.*

b. Amend Policy 4.10 to read as follows:

*~~For other discharges of contaminants to surface waterbodies or groundwater, †The effects on the environment of any discharge of contaminants to land or water are minimised by the use of measures that:~~*

*(a) first, avoids the production of the contaminants;*

*(b) secondly, reuses, recovers or recycles the contaminants; and*

*(c) thirdly, reduce the volume or amount of the contaminant to be discharged; ~~or~~*

*~~(d) finally, wherever practical utilise land-based treatment, a wetland constructed to treat contaminants or a designed treatment system prior to discharge; and~~*

*~~(e) meets the receiving water standards in Schedule 5.~~*

5.18 In regard to the request for prohibition of any new discharges of treated sewage effluent to surface water, the section 42A report (page 180) rejects this on the grounds that there may be circumstances “where it may be appropriate to allow such a discharge following close scrutiny”. Although I agree that there are few circumstances in which prohibited activity status in plans is appropriate, allowing discharges of sewage effluent to surface water, outside the emergency situations included in Rules 5.65 and 5.66, does not reflect the strong aversion to such discharges felt by Ngāi Tahu and also by many communities. If there are circumstances in which the Council considers a discharge would be appropriate, it would be helpful to have these identified. Similarly, clarification would be helpful about when an ‘overflow’ which is not the

result of either a spill or an equipment failure would be appropriately allowed. The current absence of this clarification potentially condones under-design of sewage systems.

- 5.19 Te Rūnanga also requests rewording of Policy 4.11 to strengthen the requirement for discharges to meet water quality limits. The rewording would require all discharges to meet water quality limits regardless of whether they exceed the water storage capacity of the soil and its capacity treat and remove contaminants.
- 5.20 The NPS (Policy A3(a)) requires regional councils to impose conditions on discharge permits requiring water quality limits and targets to be met. The requested amendment would provide a greater level of certainty about the standards being met in the event of unanticipated rainfall events altering the soil water status. The section 42A report (page 145) accepts a similar submission from the CRC in relation to pathogens and persistent or toxic contaminants, on the basis that these contaminants are important. It is not clear why the water quality limits should not be accorded the same importance, unless there are practical problems with such a requirement. No such concerns have been identified in the report.
- 5.21 The submitter also requests:
- (a) rewording of Policy 4.12 to require reticulation of stormwater in urban areas where a network is available, and to combine the management requirements for stormwater systems (from Policy 4.13) and wastewater systems to make them consistent with each other (a consequence of this, not specifically identified in the submission, would be to delete Policy 4.13); and
  - (b) inclusion of two new policies setting out requirements for on-site effluent treatment and disposal systems and disposal of sewage sludge.
- 5.22 Recommendation RN5 in the Section 42A report includes the requested policies for on-site effluent treatment systems and sewage sludge, with minor changes for consistency with the wording of other policies. I support these changes. The requested changes to Policy 4.12 are not recommended in the report, possibly because it was not

recognised that the amendments were intended to combine this policy with Policy 4.13. Without deletion of Policy 4.13, I agree there would be unnecessary duplication of provisions. However, I consider that the improved consistency in provisions affecting stormwater and community wastewater systems provided by the submitter's request is appropriate and desirable and should be accepted, with consequent deletion of Policy 4.13.

## 6. **MANAGEMENT OF ABSTRACTION**

### **Water allocation (submission points 358.153, 358.154, 358.156, 358.157)**

- 6.1 Te Rūnanga's submission in regard to water allocation seeks that the approach of the pLWRP be modified to better integrate management of surface water and groundwater, to avoid any further over-allocation of water and to strengthen provisions to reduce existing over-allocation. The submission (358.155) also seeks changes to environmental flow and water allocation regimes set in the sub-regional sections; this will be addressed in detail in the Group 3 hearing and is not discussed in this evidence.
- 6.2 The CRPS, in Objective 7.2.3 and Policy 7.3.4(a), requires that the interconnectivity of surface water and groundwater be considered as part of achieving integrated management of freshwater resources. The pLWRP contains provisions to address this where groundwater has a stream depletion effect as calculated in accordance with Schedule 9. I understand that past experience in Canterbury indicates that there is a need to manage effects of interconnectivity below the threshold for 'moderate' stream depletion effect as defined in Schedule 9. This situation appears to be recognised for abstraction of groundwater outside a groundwater allocation zone (see Policy 4.40) but not for abstraction within these zones.
- 6.3 Te Rūnanga requests addition of a strategic policy requiring surface water and groundwater to be considered together in setting water allocation regimes, and a further policy specifically preventing further allocation of groundwater in a catchment with an over-allocated surface

water resource, and vice versa, unless it is demonstrated that there is no hydraulic connection between the resources. This is intended to avoid the potential for abstraction of one resource to exacerbate the effects of over-allocation of the other resource by reducing the base amount of water available for allocation, and would be consistent with the requirement of the NPS, in Objective B2 and Policy B5, to avoid any further over-allocation. (I note that the authors of the section 42A report appear to have misinterpreted the intent of this submission and so have not evaluated this concern.)

- 6.4 I consider that the policies requested address a gap in provisions for considering the effects of water abstraction, and would be helpful in alerting decision-makers, in setting allocation regimes and in making decisions about proposed abstractions, to ensure the potential for effects of low-level hydraulic connectivity is properly assessed and addressed to avoid further over-allocation. I suggest it would also be desirable to amend the wording of Rule 5.101 to make it clear that these effects need to be assessed in consent applications for abstraction within a groundwater allocation zone.
- 6.5 The submitter is concerned that measures to phase out over-allocation will be inhibited by provision, in the rules governing water abstraction (Rules 5.96 and 5.101), for existing consent holders to exceed the allocation limits when renewing consents. I do not share this interpretation of the rules, but will defer to legal counsel on this matter. However I note that there should be no need to include the provision in the rule, as it is clearly provided for in section 124 of the Act anyway.
- 6.6 Te Rūnanga has requested amendments to Policy 4.61, which provides for partial restriction regimes for surface water to prevent flow dropping below the minimum flow set for the catchment. The submitter supports such regimes and wants it to be made clear in the policy that they will not only be provided for but will be actively required and implemented. As discussed by Mr Duncan, partial restrictions are an important tool for maintaining the integrity of the environmental flow regime.

- 6.7 I do not think that the amendment requested achieves this intent of the submitter, and suggest that the policy as written in the pLWRP is amended as follows instead:

*To prevent the flow falling below a minimum flow for the catchment, due to abstraction, partial restriction regimes for surface water shall be implemented. Regimes shall be designed to:*

*(a) have a single flow monitoring point for the whole catchment that all abstractors are referenced to, with additional flow monitoring points that some or all abstractors are subject to, should the hydrology of the surface water body justify it;*

*(b) provide for groups of water permit holders in the same sub-catchment to share water when takes are operating under partial restrictions; and*

*(c) unless specified in a relevant sub-regional section, and subject to the application of multiple flow monitoring points in (a), be based on a stepped or pro rata restriction regime that applies equally to all takes within an allocation block and does not induce the flow to fall below the minimum flow due to abstraction.*

#### **Transfer of water permits (submission points 358.158 –358.163)**

- 6.8 Te Rūnanga opposes provisions in the pLWRP for transfer of water permits. As discussed by other witnesses, the submitter is concerned about the potential for development of a market in water. If transfers are provided for, the submitter wishes to ensure that there are sufficient controls in place to avoid such a development, and also to ensure that transfers are clearly directed towards improving efficiency of use and reducing the extent of over-allocation.
- 6.9 A significant and recognised issue in setting water allocation regimes is how best to deal with the difference between actual water use and the maximum use provided for by the sum total of abstraction

consents. For various reasons, including seasonality of activity, climate variability and planning for future expansion of activities, many water users hold permits for abstraction of a much larger volume of water than they actually use at any time. It is my understanding that decisions on allocation regimes and resource consents have historically been made on the basis of assumptions that actual use will always be considerably less than the full consented abstraction volumes. This means that any significant movement towards use of full consented allocations is likely to have greater impacts on the resource than those assumed in planning and decision-making.

- 6.10 Provision for transfer of water permits has the potential to significantly increase the risk of un-planned for impacts. This concern does not arise in regard to temporary transfers of allocations that are not being used for a particular period of time (provided the resource is not already over-allocated), but does if consent holders are given the ability to transfer allocations, or portions of allocations, that have never been used. In these circumstances, the preferred option to relieve stress on the resource should be to cancel permits that have not been given effect to (as provided for in Policy 4.75), or alternatively to invoke review conditions to reduce the permitted volume. To avoid contributing to or exacerbating over-allocation, applications for transfer should be assessed in relation to actual and reasonable use of water, rather than full permitted volumes. Policy 7.3.4(2) of the CRPS reflects this, requiring that transfers of 'allocated but unused' water be prevented in fully allocated or over-allocated water bodies.
- 6.11 The wording of Policy 4.71 in the pLWRP implies that transfer of water permits is the sole, or at least the preferred, mechanism to be used to reduce over-allocation, increase water use efficiency and encourage effective water storage. This is a heavy burden to place on a single method. It is more likely that a range of mechanisms will be required to reverse over-allocation and encourage efficiency, including implementation of consent reviews and lapsing provisions.
- 6.12 Policy 4.73 limits transfers in over-allocated areas to those that include surrender of a portion of the allocation and to transfers into an irrigation scheme. I assume that the latter provision is intended to encourage involvement in schemes which provide for an overall reduction in



volume of use. However the wording of the policy does not ensure that there would be any such reduction.

- 6.13 Policies requested by Te Rūnanga to replace Policies 4.71 to 4.73 limit transfers to volumes which reflect actual and reasonable use and, in over-allocated areas, to those that will contribute to a reduction in over-allocation or that will reduce adverse effects on the environment. I consider that they are more clearly targeted towards the desired outcomes expressed in the pLWRP Policy 4.71 than are the current policies, although there is room for some further refinement in wording. I do not agree with the view of the section 42A report authors that limiting transfers to actual use of the existing consent holder would encourage consent holders to fully utilise their consents to maximise transfer potential. There are likely to be multiple practical and economic limitations that would prevent this action being taken.
- 6.14 Replacement of the existing policies with those requested would need to be accompanied by inclusion of a rule replacing Rules 5.107 and 5.108 and reflecting the limitations in the policies. The submitter's legal counsel has discussed the matter of the vires of rules raised in the submission. I consider that the requested policies would appropriately be implemented by rules:
- a. According discretionary activity status to transfers that can demonstrate they are limited to volumes of actual use by the existing consent holder; and
  - b. According non-complying activity status to all other transfers.

## **7. PROTECTION OF BRAIDED RIVERS AND WETLANDS**

### **Braided rivers (submission points 358.167 – 358.172)**

- 7.1 Te Rūnanga supports rules 5.129 to 5.131 controlling damming of water bodies, but requests amendments to policies on damming and diversion of water bodies. In particular, the submitter requests that Policy 4.41 be replaced by a policy precluding damming on main stems or significant tributaries of all braided rivers, as well as on high naturalness water bodies. Mr Duncan's evidence discusses the

importance of braided river systems and the CRPS specifically provides for maintenance of the natural character of these rivers by avoiding damming (Policy 7.3.2). Policy 4.41 currently does not require that damming be avoided in any river. Although some of the matters listed in the policy address some components of the natural character of braided rivers, the policy does not clearly identify the full range of effects and does not give any prominence to braided rivers over other hill-fed rivers. This deficiency is not corrected by the amendments recommended in the section 42A report (Recommendation R4.41) and I believe that the more directive policy requested by Te Rūnanga would be more consistent with the CRPS. In view of the degree of significance of braided river systems as expressed by Mr Duncan, I consider there would be justification in making damming of the main stem of a braided river or a significant contributing tributaries (as defined in the requested policy) a prohibited activity.

- 7.2 As well as addition of the specific policy above, the submitter also requests an amendment combining other components of Policy 4.41 and Policy 4.43 into a new policy to improve clarity and to provide for exercise of kaitiakitanga, consistent with the requested objective relating to this. I generally support this request as it makes the provision easier to follow, particularly in regard to the kinds of effects for which mitigation will be contemplated; however the proposed clause relating to kaitiakitanga would be improved by some detail to assist assessment of potential effects on this. I note that the section 42A report does not make any comment on the request to include this clause.

### **Wetlands (submission points 358.173 – 358.179)**

- 7.3 The current state of wetlands in Canterbury is of concern to Te Rūnanga and many other groups, and Te Rūnanga wishes to adopt the evidence of Dr Gerbeaux, for the Department of Conservation, which describes the ecological basis for this concern. Other witnesses for Te Rūnanga describe the submitter's cultural, hydrological and water quality concerns. To ensure that there is no further degradation of these important natural systems, Te Rūnanga seeks a stronger policy

framework that recognises that all remaining natural wetlands are significant.

- 7.4 Objectives A2 and B4 in the NPS requires protection of significant values of wetlands; Dr Gerbeaux's evidence suggests that all remaining natural wetlands in Canterbury meet the criteria for ecological significance (provided 'wet paddocks' are clearly excluded). Policy 9.3.5 in the CRPS provides for protection of the full range of values associated with ecologically significant wetlands and promotes protection and enhancement of all remaining wetlands. Policy 11.3.6 recognises the role of natural features (including wetlands) in mitigating the effects of natural hazards.
- 7.5 The objective requested by Te Rūnanga to replace pLWRP Objective 3.6 describes the full range of values which contribute to significance of wetlands, in comparison to Objective 3.6, which focuses only on indigenous biodiversity values. The requested objective also promotes enhancement of the overall wetland resource, consistent with the ethic of kaitiakitanga. I consider that this objective gives greater effect to the NPS and the policies of the CRPS than the current one.
- 7.6 Te Rūnanga also requests deletion of the provision, in Policy 4.80, for installation of infrastructure to cause significant effects on wetlands, provided these are offset in some way. I agree with the submitter that this conflicts with Policy 4.79, which specifically restricts the effects that may be contemplated to those that are temporary and minor. It is acknowledged that it may be impracticable to ensure that the disruptive temporary activities often required to install infrastructure have only minor effects on wetland values, and I support the amendment to Policy 4.79(a) requested by Te Rūnanga to allow for occurrence of temporary effects that are more than minor. Given the vulnerability and current state of wetlands in Canterbury, specific policy provision for long term significant adverse effects is not appropriate.
- 7.7 Te Rūnanga also requests an amendment to Policy 4.79(a) to include research and customary uses in the activities specifically provided for. This is similar to a request made in relation to high naturalness water bodies, which I have discussed in paragraph 4.20. The comments I have made there apply equally to the submitter's request here.

- 7.8 The submitter supports the intent of plan to integrate management of riverine and lacustrine wetlands with management of the water bodies that support them, but has noted that the way this is translated into plan is confusing and inconsistent. As a result, rules affecting the use of surface water bodies do not always provide appropriate protection of wetlands and, conversely, they sometimes appear to exclude activities which are appropriate. Various options with potential to address this have been pursued by a number of submitters and an amalgam may be the best solution. Unfortunately, insufficient time has been available for the various submitters to develop such a solution.
- 7.9 A particular concern of Te Rūnanga regarding the relationship between rules for wetlands and rules for rivers and lakes is the confused situation in the pLWRP as to how activities associated with artificial opening of hāpua, coastal lakes and lagoons, which are allowed for in Policy 4.79(b), are provided for in the rules. As discussed by other witnesses, Te Rūnanga and the papatipu Rūnanga have an interest and an active involvement in such activities in their role as kaitiaki of culturally significant wetlands including Te Waihora and Wairewa.
- 7.10 The submitter has suggested an amendment to Rule 5.141 to carry the provision made in Policy 4.79(b) into the rules. (I note there is a typographical error in the numbering of the rule in the submission, but the intended reference is clear from the context.) The requested amendment will not achieve the desired effect, since Rule 5.141 does not apply to wetlands (including hāpua and lagoons) in river and lake beds. Rule 5.96, which regulates taking and use of surface water, contains a condition specifically excluding activities in wetlands. The effect of this is to make taking of water to discharge it to the sea by means of an artificial opening non-complying under Rule 5.97. This would be inconsistent with Policy 4.79(b). I consider it would be appropriate to amend Condition 3 of Rule 5.96 to include the intent of the amendment sought by Te Rūnanga, as follows:

*3. Unless it is associated with the artificial opening of a hāpua, lagoon or coastal lake to the sea, ~~the take is not from a natural wetland or hāpua or a high naturalness river that is listed in Sections 6-15.~~*

4. The take is not from a high naturalness river that is listed in Sections 6-15.

and addition of reference to condition 4 in Rule 5.97.

I believe there is scope to make this amendment as a consequence of Te Rūnanga's submission seeking to clarify how the rules apply to wetlands within the beds of lakes and rivers (submission point 358.179).

- 7.11 In addition to the above request, submission point 358.178 proposes a further amendment to Rule 5.141 to make it easier to read and to limit its scope to work associated with existing infrastructure and some other specified activities, rather than providing broadly for any infrastructure. I agree that, in the sensitive wetland environment, new infrastructure should generally have to meet a more stringent test than activities associated with existing infrastructure, because this has potential to introduce new and unknown impacts. Provision for infrastructure or works to protect the wetland is a reasonable exception to this principle, and I can also see benefits in making some provision for stock crossings and fencing to avoid stock intruding on the wetland. I consider provision for vehicle crossings is more problematic and do not support this in the absence of a definition limiting the scale of such crossings.

## 8. EFFECTS OF SPECIFIC ACTIVITIES

### **Gravel extraction (submission points 358.164 – 358.166)**

- 8.1 Te Rūnanga generally supports Policy 4.91 which recognises the need for regulation of gravel extraction to control a range of effects. However the submitter is concerned that neither the policy, nor Rule 5.125 which implements the policy, adequately recognise the potential for gravel extraction to result in effects on mahinga kai. and can include both direct effects on the habitat of mahinga kai species (such as deposit of gravel on cress beds) and effects on the ability to harvest these species (such as effects on flow and river morphology).

- 8.2 To address these concerns, Te Rūnanga has requested that effects on access to mahinga kai be included in matters identified in Policy 4.91(b) and that some further conditions be added to those applied to gravel extraction permitted by Rule 5.125:
- a. preventing deposition of gravel in wetted or vegetated areas, in order to avoid impacts on cress beds and to maintain natural occurrence of channels and pools;
  - b. rehabilitation of the bed and banks, in order to maintain natural habitats;
  - c. avoiding extraction while birds are breeding and nesting;
  - d. avoiding Areas of Statutory Acknowledgment.
- 8.3 The submission on Policy 4.91 is not considered in the section 42A report. I consider it would be appropriate to recognise effects on mahinga kai in this policy as requested. This would be consistent with provision for protection of cultural values in the objectives and other policies of the plan.
- 8.4 The section 42A report authors consider that these conditions are either impractical or unnecessary. However I understand that the first three are commonly applied as standard conditions on resource consents for gravel extraction activities of a greater magnitude than that provided for in Rule 5.125, which suggests that this view is not shared across the Council. These conditions are all consistent with kaitiakitanga and, as a rule, are unlikely to be difficult to comply with in relation to the small scale activities permitted. However, given the small scale of activities, I accept that it might be more reasonable to limit the location of activities in relation to bird nesting and breeding sites, as recommended in the section 42A report, than to exclude small scale extraction entirely in the breeding and nesting season. I note also that use of the word 'wetted' appears to have been interpreted differently by the report authors than was intended by the submitter. To clarify this matter it would be appropriate to amend the first requested condition to read:

*No gravel is deposited or stored in standing or flowing water or in any vegetated area of the bed or banks.*

- 8.5 Provision for gravel extraction as a permitted activity in an Area of Statutory Acknowledgement is inconsistent with the status of affected party accorded to Ngāi Tahu under the Ngāi Tahu Claims Settlement Act 1998, as it would not allow for consultation. Restricted discretionary status would provide more appropriately for this.
- 8.6 Rule 5.125, as written, applies to the beds of both lakes and rivers. Te Rūnanga has requested an amendment to exclude its application to lakes. I consider that this is appropriate and would be consistent with Objective 3.20 and Policy 4.91, which only provide for extraction from river beds. Gravel extraction from lakes is not necessary for flood control purposes and lakes do not experience the same gravel recharge as rivers do. The potential impacts of even small volumes of gravel extraction on a lake bed environment are considerably more significant than in a river bed and should not be subject to assessment through a resource consent process. I note that the section 42A report authors have misinterpreted the submitter's intent in regard to this point.
- 8.7 Rule 5.126 exempts work carried out by, or for, the Council from controls on the rate of extraction. Te Rūnanga requests that this rule be deleted on the grounds that it is not appropriate for such an exemption to be provided without any consideration of the effects of the activity. The response to this in the section 42A report explains that the rule is intended to implement a management approach described in the Canterbury Regional River Gravel Management Strategy adopted in October 2012 (after the pLWRP was notified). This approach provides for the Council to issue written authorisations to individuals to extract gravel where this activity is consistent with flood hazard management purposes. This context is not explained in the pLWRP.
- 8.8 Although I have some sympathy with the intent of Rule 5.126 in encouraging gravel extraction to align with the Council's flood management needs, I consider that it is inconsistent with Policy 10.3.4 in the CRPS, which requires consideration of the effects of removal of bed material on the instream and other values of the beds. It is also inconsistent with Policy 4.91 in the pLWRP. Although the Gravel Management Strategy states that the extraction will be carried out in compliance with a code of practice, this code has not yet been

developed. In its absence there is no provision for assessment or management of effects of extraction activities permitted by the rule. A more appropriate means of achieving the intent of the Gravel Management Strategy would be for the Council to seek a resource consent for the gravel extraction activities it considers are required, and then to issue authorisations to extractors within the context of that consent. I agree with the submitter that Rule 5.126 should be deleted.

- 8.9 Te Rūnanga has also made a submission requesting that Schedule 17 be reviewed. This submission is addressed in Ms Lynch's evidence.

**Natural hazard response (submission points 358.180 – 358.183)**

- 8.10 Te Rūnanga opposes Policies 4.92 to 4.94 on the basis that they do not provide adequately for consideration and management of the effects of hazard remediation and recovery activities. As discussed by other witnesses, effects of particular concern to the submitter include disturbance of sites and areas of cultural significance, as well as effects on water quality, water bodies and ecosystems. The submitter requests that these policies be replaced by two policies providing for the activities but also requiring consideration of their effects.
- 8.11 I agree with the submitter that the policies on natural hazards (which would be more accurately headed "response to hazard events") are unbalanced. It is appropriate to enable response and recovery activities, and to acknowledge that rapid action is sometimes necessary in response to hazard events. However this does not mean that the adverse effects of these activities do not need to be considered and addressed. Policies 4.92 and 4.94 do not require that any effects be considered. Policy 4.93 requires that temporary adverse effects be minimised, but makes no mention of avoidance or minimisation of longer term effects or any mitigation of these.
- 8.12 Those carrying out response and recovery activities have a responsibility to carry out activities in a way that does not lead to avoidable effects, or to mitigate effects that cannot be avoided. This is recognised by conditions in the rules that provide for recovery activities, including Rule 5.5, which requires a management plan



considering effects and how they will be mitigated. It should also be recognised properly in the policies. I consider that the policies requested by Te Rūnanga provide appropriately for the consideration and management of effects and that they reflect the implied policy position taken in the rules affecting recovery activities.

## 9. **DEFINITIONS (submission points 358.90 – 358.93)**

- 9.1 Section 1.3 provides a narrative describing the relationships of Ngāi Tahu to land and waters in Canterbury. This narrative sets out the mandate of Te Rūnanga o Ngāi Tahu (the 'iwi authority') and ngā rūnanga (representing pāpatipu marae communities) and includes explanations of the concepts of mauri, kaitiaki and ki uta ki tai which are fuller and more accurate than the definitions provided in Section 2.10. Inclusion of the definitions is unnecessary and could be confusing where these differ from the narrative in Section 1.3; and I note that the section 42A report has agreed with the submitter on this point.

## 10. **FURTHER SUBMISSIONS**

- 10.1 As well as its primary submission, Te Rūnanga lodged further submissions in relation to various points raised by other submitters. Some of these are closely related to the matters discussed in the previous sections, but others are concerned with separate matters. This section of my evidence addresses the matters covered in the further submissions, where these have not already been discussed.

### **Objectives**

- 10.2 Te Rūnanga opposes a submission made by Genesis Power Limited (196.3 - 196.5) that seeks an amendment to the description, in Section 2 of the pLWRP, of how objectives and policies apply. This submission is based on concern about the lack of guidance in the plan about the relationship between objectives and policies and how apparent conflicts should be resolved. Te Rūnanga shares this concern, as

discussed in Section 4 of this evidence, but thinks that the wording proposed by Genesis Power will have the opposite effect to that intended. I note that this wording has been recommended in the section 42A report (Recommendation R2.0) for inclusion.

- 10.3 I do not have strong objections to the wording proposed, but I do not think that it is particularly helpful, as the question of how the 'overall broad judgement' should be made remains in the absence of a clear relationship between objectives. I consider that amending the objectives to clarify their relationships, as sought by Te Rūnanga and discussed in Section 4 above, is a far better solution to the problem.

#### **Strategic policies**

- 10.4 Te Rūnanga supports submissions by Fish and Game New Zealand (347.64 - 347.66) that request inclusion of several new policies with the pLWRP strategic policies. The requested policies concern the requirements to meet water allocation and water quality limits and outcomes, how these are to be established and action to be taken if they are exceeded. In general, the matters included in the Fish and Game policies are the same as those addressed by Te Rūnanga in its requested Policies 4.1 to 4.5, which I have discussed in paragraphs 4.16 to 4.19. I think that the wording proposed by Te Rūnanga addresses the concerns more clearly than that suggested by Fish and Game.
- 10.5 The policies proposed by Fish and Game also make specific reference to the requirement to give effect to the provisions in water conservation orders. I consider it is unnecessary to include this as a policy in the plan, as it is required by the RMA anyway.
- 10.6 Te Rūnanga also supports a submission by Fish and Game (347.115) requesting a new policy on mixing of waters. I have discussed this submission in paragraphs 4.25 to 4.29.

**Non-point source discharges**

- 10.7 Te Rūnanga lodged further submissions on a number of submissions made by Fish and Game New Zealand. In brief:
- (a) It opposes submission 347.76 which seeks to replace Policy 4.11 with a policy controlling a wide range of non-point source discharges from land uses. Although Te Rūnanga supports the intent of the requested policy, it considers that the drafting neglects relevant aspects including cultural values;
  - (b) It supports the intent of policies to reduce nutrient discharges in over-allocated and near-allocated catchments (347.82 - 347.85) and other policies to manage nutrient discharges (347.86 - 347.88). It also supports the intent of submission 347.146 which requests rules ensuring that nutrient discharge limits achieve water quality outcomes and that these limits are not exceeded, but considers that there is not sufficient information available at present to apply these stringent controls at a region-wide scale.
- 10.8 The policy sought in submission 347.76 brings together consideration of non-point source discharges that are currently addressed in different groups of policies in the pLWRP. For example, the sediment discharge component is generally addressed in Policies 4.17 to 4.19, part of the faecal contaminant component is addressed in Policy 4.26, which controls stock access to water bodies, and nutrient discharges are addressed in Policies 4.28 to 4.38, which I have discussed in Section 5 of my evidence. Policy 4.11, which the submission seeks to replace, addresses direct discharges to land, not non-point source discharges, and it is not clear why Fish and Game has linked the requested policy to his one. While there are many aspects of the policy that could potentially be assessed, Te Rūnanga has focused its further submission on its failure to provide for cultural values. The policy is very directive in regard to restriction of activities to avoid effects on water quality in general, rather than on any particular values associated with water quality. However the policy approach, if adopted to the extent that it is not already provided for in other policies, would support cultural values associated with healthy water quality.

- 10.9 Submissions 347.82 – 347.85 have been discussed in paragraph 5.11, where I have recommended that some aspects be incorporated into the nutrient discharge regime proposed by Te Rūnanga. The requested policy in submission 347.86 is similar to Te Rūnanga's requested policy included in the proposed regime set out in paragraph 5.10 of my evidence.
- 10.10 Submissions 347.87 and 347.88 require irrigators to implement a farm plan to manage nutrient discharges, and require the cumulative effects of increased irrigation on water quality to be considered in applications for water permits for irrigation. The nutrient management regime discussed in Section 5 of my evidence requires anyone introducing irrigation or increasing the scale of this to obtain a resource consent specifically to enable assessment of the effects on water quality from non-point source nutrient discharges and ensure appropriate measures are taken to address these effects. The proposed regime also requires all land users, including irrigators, to take all practical measures to minimise their nutrient discharges. It does not specify the measures that must be taken; these may include implementation of a farm plan, but I do not consider it is necessary or appropriate to specify this, as this could constrain the use of alternative effective measures.
- 10.11 Te Rūnanga's opposition to submission 347.146 relates to its concerns about the nutrient zones established in the pLWRP. This matter is discussed in detail in Section 5 of my evidence.
- 10.12 Te Rūnanga opposes submissions of Hunter Downs Irrigation (256.23) and Fonterra Co-operative Group Ltd (270.51) which respectively seek exemptions from nutrient discharge rules for irrigators within group schemes and for dairy conversions currently planned or underway. The regime proposed by Te Rūnanga and discussed in Section 5 of my evidence does not distinguish between land users. As discussed there, rules should deal with all land users on the basis of effects.
- 10.13 Te Rūnanga opposes submissions of Fonterra Co-operative Group Ltd requesting recognition of its industry self-auditing system (270.70, 270.71, 270.72) in part. Te Rūnanga supports industry-led audit systems but considers audits should be carried out by independent auditors. I agree; independence is an important principle of auditing.to

ensure results can be relied on. As noted above, the regime discussed in Section 5 does not specify measures to be used to minimise nutrient discharges, and industry-led systems could be used where appropriate.

- 10.14 Trustpower Ltd (submission 250.92) requests provision for catchment-based solutions to nutrient loss, incorporating storage and efficient use of water. Te Rūnanga supports provision for a variety of measures to be used to address the problem, but catchment-based solutions cannot be developed until sufficient information is available for this. These matters have been discussed above and in Section 5 of my evidence.

#### **Water abstraction**

- 10.15 Te Rūnanga supports submissions of Fish and Game New Zealand seeking addition of policies reflecting interconnectivity of surface and groundwater (347.103) and requiring equitable allocation within water allocation regimes (347.104) and opposing a submission by Rangitata Diversion Race Management Limited (197.3) seeking entrenchment of a 'first come first served' basis for allocation and 'first in last out' for restrictions. I have discussed interconnectivity of groundwater and surface water in Section 6. I prefer Te Rūnanga's requested policy to that of Fish and Game, as it provides greater direction as to how the intent of the policy will be implemented.
- 10.16 The 'first come first served' approach to water allocation has shown to discourage efficient use of water and, when the resource is over-allocated, presents a significant impediment to entry of new land uses and land users. A 'first in last out' approach when imposing restrictions also provides no incentive for existing users to be efficient, and provides new users with only low reliability of water being available, which can have significant implications for business viability for new users. The proposed Rangitata Diversion Race Management amendments are not appropriate for those reasons; conversely, the Fish and Game proposed policy could be helpful in moving away from the historic approach.

### **Transfers**

- 10.17 Te Rūnanga opposes submissions by Rangitata Diversion Race Management Limited (197.58) and Valetta Irrigation Ltd (303.2) requesting specific additional provision for transfer of water permits. It also opposes the requested inclusion by Fish and Game (347.73) of provision for transfers as one of required means of improving water use efficiency. I have discussed the matter of transfers in paragraphs 6.7 to 6.13 and my comments there apply to these submissions.

### **Braided rivers**

- 10.18 Te Rūnanga opposes a definition of 'active bed' proposed by Fonterra Co-operative Group Ltd (270.65, 270.66) on the basis that it does not recognise that vegetated areas, including vegetated islands and marginal strips, are an important component of these systems. Mr Duncan has provided evidence on the importance of protecting the integrity of braided river systems, and I agree with Te Rūnanga that inclusion of the definition sought could provide a basis for this to be undermined.

### **Provision for electricity and other infrastructure**

- 10.19 Te Rūnanga opposes a large number of submissions seeking enhanced provision in policies and rules for infrastructure that supports hydro-electricity generation, irrigation and/or water storage and conveyance systems ((Genesis Power Limited 196.15, 196.17, 196.25, 196.32, 196.35; Rangitata Diversion Race Management Limited 197.12, 197.37, 197.38, 197.57, 197.89; Meridian Energy Limited 221.4, 221.6, 221.7, 221.29, 221.30, 221.34, 221.93; Trustpower Limited 250.3, 250.48, 250.57; Hunter Downs Irrigation 256.3, 256.10, 256.11, 256.46, 256.57). While supporting the requirement to recognise existing investment in infrastructure, and provide a level of certainty to infrastructure operators about their ability to continue to maintain and develop their operations, Te Rūnanga has some significant concerns with the weight accorded to this by the various

submitters in comparison to other matters needing to be addressed. I share those concerns as follows.

- 10.20 The amendments requested in submissions do not adequately give effect to the requirements of the NPS to maximise efficient use of water and to phase out over-allocation (Objectives B3 and B2) and the explicit requirement of Policy 7.3.11 of the CRPS for improvements in efficiency to be considered in relation to existing infrastructure. Although I acknowledge that increasing efficiency will be difficult for some existing systems, I think it is appropriate that the policy framework provides a strong incentive for users to find ways of improving the efficiency of their use. Arguments about the benefits and costs of this in a particular situation may be made in the context of a resource consent application, but exempting activities associated with operation of infrastructure from the policies in the pLWRP will limit the integrity and the effectiveness of the overall policy direction.
- 10.21 The amendments requested do not provide for equitable treatment of users carrying out activities with similar effects.
- 10.22 Some submissions seek to modify the order of priorities set out in the CWMS by elevating second-order priorities. This is inconsistent with the requirement for the Council to have particular regard to the CWMS vision and principles.
- 10.23 The submissions do not provide for effective management of the effects of installation, maintenance, repair and upgrading of infrastructure on the values of fresh water bodies. Consideration of environmental effects of infrastructure is required by Policy 7.3.11 of the CRPS. In most circumstances, these activities should be subject to the same requirements as activities with similar effects on the environment of water bodies.

#### **Miscellaneous matters**

- 10.24 Disturbance of beds: Te Rūnanga opposes a request by NZ Defence Force (154.25) for a rule permitting disturbance of beds because this does not include any provision to consider effects on mahinga kai (which are discussed in relation to gravel extraction in Section 8 of my

evidence). The rule requested permits any disturbance of beds provided it is not in a high naturalness river, does not deposit anything other than bed material on the bed and does not encroach on existing infrastructure. It does not allow for consideration of any effects on the range of instream values in the water bodies, and would be inconsistent with the objectives and policies of the plan in regard to these.

- 10.25 Indigenous biodiversity offsets Te Rūnanga: supports a submission by DOC (120.5) proposing a definition of “Indigenous biodiversity offset”. I agree with Te Rūnanga that if offsets are to be used in the plan it is important to define their bounds so that the provisions are implemented appropriately to achieve their intent. I agree that the criteria of “like for like”, protection of particularly vulnerable species, likelihood of being achieved and sustained, and enhancement of conservation outcomes are appropriate to ensure the intent is not undermined.
- 10.26 Definitions for farming and rural research: Te Rūnanga supports the intent of Lincoln University (submission 310.26) in requesting inclusion of definitions of ‘farming’ and ‘rural research activities’, but has concerns about the specific wording. I agree that it would be desirable for the plan to include a clear definition of ‘farming activity’ to provide certainty about the application of rules relating to this activity. Many district plans and regional plans include similar definitions. However, as noted by Te Rūnanga, the definition requires fine-tuning to exclude activities such as indoor boarding of animals that have different effects characteristics than those which rules concerning farming activity are designed to address. I do not support the definition of ‘rural research activities’ or exclusion of these activities from the ‘farming’ definition. The activities included in this requested definition have been grouped together on the basis of a business model rather than the likelihood of similar effects, and could include activities of quite different kinds, including large scale ‘farming’ operations. The purpose of the PWLRP is to manage the effects of activities in order to achieve outcomes related to the purpose of the RMA, not to provide specifically for particular business enterprises.



- 10.27 Description of non-complying activities: Te Rūnanga opposes a submission by Genesis Power Limited (196.6) proposing an explanation, in Section 2.3, of how consent applications for non-complying activities will be considered. The explanation attempts to interpret the requirements for assessment of non-complying activities set out in the RMA, but does not accurately reflect these requirements. It would thus be inappropriate to include it in the plan.
- 10.28 Compliance with water conservation orders: Te Rūnanga opposes a submission by Trustpower (250.75) for a rule specifying conditions to ensure abstraction from a water body subject to a water conservation order complies with the terms of that order on the grounds that it is inconsistent with the provisions on this matter in the RMA. This will be discussed in legal submissions.
- 10.29 Augmentation: Te Rūnanga opposes a submission by Hunter Downs Irrigation (256.24) seeking a discretionary activity rule to specifically provide for moving water from one catchment to another for the purposes of 'environmental augmentation'. I have discussed mixing of waters in Section 4 of my evidence. The matters of concern discussed there should be required to be in relation to any activities proposing to move water between catchments.
- 10.30 Effects of abstraction on water quality: Te Rūnanga supports a submission by Fish and Game (347.114) requesting addition of a policy that identifies the range of potential effects of abstraction on the quality of surface water bodies that need to be considered. This policies is helpful in providing guidance about the types of effects that can occur and there would be merit in incorporating this into the plan.

## 11. CONCLUSION

- 11.1 On the basis of my assessment of sections 1 to 14 of the submission made by Te Rūnanga on the pLWRP, I consider that the submission provides for some significant improvements in the clarity of policy direction of the plan, in its consistency with the CRPS, the NPS and the purpose of the RMA and in provision for values of significance to Ngāi

Tahu. In general, I support the requests made by Te Rūnanga except as specifically identified in the body of this evidence.

**Sandra McIntyre**

**4 February 2013**

## ANNEXURE 1: Comparison of LWRP objectives with Te Rūnanga o Ngāi Tahu proposed changes

LWRP	Te Rūnanga o Ngāi Tahu	Proposed amendment
<p>3.2 Water and land are recognised as an integrated resource embracing the philosophy and practice of ki uta ki tai thus recognising the connections between land, groundwater, surface water and coastal waters.</p> <p>3.4 In keeping with the philosophy and practice of ki uta ki tai the interconnectivity of land, water and the coast is reflected in its management.</p>	<p>Objective 1</p> <p>Land and water are managed as integrated natural resources:</p> <ul style="list-style-type: none"> <li>- Enabling Ngāi Tahu customary uses and traditional relationships with land and water;</li> <li>- Focusing on managing whole catchments and applying the ethic of ki uta ki tai – from the mountains to the sea; and</li> <li>- Managing the connectivity between surface water and groundwater, and between fresh water, land and the coast.</li> </ul>	<p>Objective 1:</p> <p>Land and water are managed as integrated natural resources, reflecting:</p> <ul style="list-style-type: none"> <li>- The ethic of ki uta ki tai – management of whole catchments from the mountains to the sea; and</li> <li>- The connectivity between surface water and groundwater, and between fresh water, land and the coast.</li> </ul>
<p>3.1 Water is recognised as essential to all life and is respected for its intrinsic values.</p> <p>3.7 The mauri of lakes, rivers, hāpua and natural wetlands is maintained or restored and they are suitable for use by Ngāi Tahu and the community.</p> <p>3.8 The health of ecosystems is maintained or enhanced in lakes, rivers, hāpua and wetlands.</p> <p>3.9 The existing natural character values of alpine rivers are protected.</p> <p>3.10 The significant indigenous biodiversity values, mahinga kai values, and natural processes of rivers are protected.</p> <p>3.13 Those parts of lakes and rivers that are valued by the community for recreation are suitable for contact recreation.</p> <p>3.14 High quality fresh water is available to meet actual and reasonably foreseeable needs for community drinking water supplies.</p>	<p>Objective 2(a)</p> <p>Kaitiakitanga is exercised - freshwater bodies and their catchments are maintained in a healthy state or, where they have been degraded, they are improved.</p> <p>Objective 2(b)</p> <p>The quality and quantity of water in fresh water bodies and their catchments is managed to:</p> <ul style="list-style-type: none"> <li>(i) Safeguard the life-supporting capacity of ecosystems and ecosystem processes, including ensuring sufficient flow and quality of water to support the habitat and feeding, breeding, migratory and other behavioural requirements of indigenous species, nesting birds and, where appropriate trout and salmon;</li> <li>(ii) Provide for actual and any reasonably foreseeable needs for drinking water or stockwater;</li> <li>(iii) Support customary uses and contact recreation in water bodies which are valued for these purposes;</li> <li>(iv) Maintain natural hydrological and geomorphic processes including flushing and opening hāpua and river mouths, flushing algal and weed growth, and transporting sediment;</li> <li>(v) Maintain or enhance water quality in all lakes, rivers, wetlands, springs, hāpua and coastal lagoons;</li> <li>(vi) Maintain water levels in aquifers, and avoid salt-water intrusion of coastal groundwater sources; and</li> </ul>	<p>Objective 2:</p> <p>Kaitiakitanga is exercised - freshwater bodies, including hāpua and coastal lagoons, and their catchments are maintained in a healthy state or, where they have been degraded, they are improved to support:</p> <ul style="list-style-type: none"> <li>(i) Continued healthy functioning of ecosystems and ecosystem processes, including the habitat and life cycle requirements of indigenous flora and fauna, nesting birds and, where appropriate, trout and salmon;</li> <li>(ii) Actual and any reasonably foreseeable needs for drinking water and stockwater;</li> <li>(iii) Customary uses and contact recreation where the water bodies are valued for these purposes;</li> <li>(iv) Continued functioning of natural hydrological and geomorphic processes including seasonal and diurnal fluctuations in level or flow, flushing, opening of hāpua and river mouths, and transporting sediment;</li> <li>(v) Healthy surface water quality, and improvement of quality where this is degraded;</li> <li>(vi) Sustainable and high quality groundwater resources which support base flows or levels in surface water bodies, springs and wetlands; and</li> </ul>

LWRP	Te Rūnanga o Ngāi Tahu	Proposed amendment
	<p>(vii) Maintain water levels in wetlands, hāpua, coastal lagoons, lowland springs and springfed water bodies or improves levels where the values of these water bodies have been degraded through diversions, abstractions or land drainage</p> <p>(viii) Maintain or enhance the natural character of freshwater bodies including braided rivers, and their margins, wetlands and hāpua and coastal lagoons.</p>	(vii) Retention or enhancement of their natural character and that of their margins, particularly for braided rivers, wetlands, hāpua and coastal lagoons.
3.3 The relationship of Ngāi Tahu and their culture and traditions with the water and land of Canterbury is protected.	<p>Objective 3</p> <p>Ngāi Tahu's past present and future relationship with the land and water of Canterbury is recognised and provided for</p>	
3.6 The significant indigenous biodiversity values of natural wetlands and hāpua are protected and wetlands in Canterbury that contribute to cultural and community values, biodiversity, water quality, mahinga kai or ecosystem services are enhanced.	<p>Objective 4</p> <p>Wetlands and hāpua are recognised and valued for their rich ecological and cultural values and their water cleansing and flood retention properties and:</p> <p>(a) The biodiversity, cultural, recreational and amenity values of natural wetlands and hāpua are protected and where those values have been degraded, they are improved; and</p> <p>(b) The overall stock of wetland areas in the region is increased.</p>	<p>Objective 4</p> <p>Wetlands, coastal lakes, lagoons and hāpua are recognised and valued for their rich ecological and cultural values and their water cleansing and flood retention properties and:</p> <p>(a) The biodiversity, cultural, recreational and amenity values of natural wetlands and hāpua are protected and where those values have been degraded, they are improved; and</p> <p>(b) The overall stock of wetland areas in the region is increased.</p>
3.5 Outstanding fresh water bodies and hāpua and their margins are maintained in their existing state or restored where degraded.	<p>Objective 5</p> <p>The outstanding characteristics and values of Canterbury's fresh water bodies and their catchments are protected, and lakes and the main stems of rivers, which have not already been modified, are retained in their natural state.</p>	<p>Objective 5</p> <p>The outstanding characteristics and values of Canterbury's fresh water bodies and the catchment conditions contributing to these are protected, and lakes and the main stems of rivers which have not already been modified are retained in their natural state.</p>
3.12 Groundwater continues to provide a sustainable source of high quality water for flows and ecosystem health in surface waterbodies and for abstraction.	<p>Objective 6</p> <p>Canterbury's groundwater resources remain a sustainable source of high quality water which supports base flows or levels in surface water bodies, springs and wetlands and which is available for abstraction.</p>	Incorporated in Objective 2

LWRP	Te Rūnanga o Ngāi Tahu	Proposed amendment
<p>3.11 Water is available for sustainable abstraction or use to support a variety of economic and social activities and maximum social and economic benefits are obtained from the efficient storage, distribution and use of the water which is available for abstraction.</p> <p>3.15 A regional network of water storage and distribution facilities provides for sustainable, wise, efficient and multiple use of water.</p> <p>3.21 Land uses continue to develop and change in response to socio-economic and community demand while remaining consistent with the CWMS targets.</p> <p>3.22 Community outcomes for water quality and quantity are met through managing limits.</p> <p>3.23 All activities operate at “good practice” or better to protect the region’s fresh water resources from quality and quantity degradation.</p> <p>3.16 Infrastructure of national or regional significance is resilient and positively contributes to economic, cultural and social wellbeing through its efficient and effective operation, ongoing maintenance, repair, development and upgrading.</p>	<p>Objective 7 Fresh water is available for abstraction to provide for the economic well-being of people and communities, within the allocation limits or management regimes which are set to give effect to Objectives 2(a) and (b).</p> <p>Objective 8 Changes and intensification of land uses occur within water quality allocation limits or management regimes which are set considering the sensitivity of the receiving environment and to give effect to Objectives 2(a) and (b).</p> <p>Objective 9 Water harvest and storage schemes are developed which provide for all of the following:</p> <ul style="list-style-type: none"> <li>(a) The exercise of kaitiakitanga;</li> <li>(b) Reliable water for irrigation or hydro-electricity generation;</li> <li>(c) The maintenance or enhancement of the flows or levels and the quality of water in water bodies within the catchment; and</li> <li>(d) Integrated management of the supply of irrigation water with land uses and resulting contaminant discharges.</li> </ul> <p>Objective 10 Fresh water is managed prudently as a shared resource with many values, and:</p> <ul style="list-style-type: none"> <li>(a) Community-based water harvest and storage schemes are developed which maximise the number of potential users and combined uses of water where practicable;</li> <li>(b) People’s use of water is as efficient as practicable; and</li> <li>(c) Land uses and the discharge of contaminants are managed in accordance with good practice and taking into account the capability of the land and the sensitivity of the receiving environment.</li> </ul>	<p>Retain Objectives 7 – 10, and insert additional objective between Objectives 9 and 10:</p> <p>Existing infrastructure is recognised and provided for while requiring ongoing improvements in water use efficiency and reductions in adverse environmental effects.</p>

LWRP	Te Rūnanga o Ngāi Tahu	Proposed amendment
3.17 The mauri and the productive quality and quantity of soil are not degraded.	Canterbury soils are healthy and their susceptibility to human-induced erosion or contamination is minimised	Canterbury soils are healthy and their susceptibility to human-induced erosion and risk of contamination is minimised.
3.18 The risk of flooding or erosion of land or damage to structures is not exacerbated by the diversion of water, erection, placement or failure of structures, the removal of gravel or other alteration of the bed of a lake or river, removal of vegetation, or the re-contouring of adjacent land.	Retain	
3.19 The risk and effects of natural hazards, including those arising from seismic activity and climate change, are reduced through protecting the effectiveness of natural hazard protection infrastructure, wetlands and hāpua.	The risk of and effects of natural hazards including those arising from seismic activities and climate change are mitigated through maintaining the effectiveness of both 'man-made' natural hazard protection infrastructure and wetlands and hāpua as natural water retention areas.	The effects of natural hazards, including those arising from seismic activities and climate change, are mitigated through maintaining the effectiveness of constructed protection infrastructure and the water retention capacity of wetlands and hāpua.
3.20 Extraction of gravel from riverbeds maintains flood carrying capacity, protects infrastructure and provides a resource to enable development.	Gravel in riverbeds is able to be extracted to maintain flood carrying capacity and to provide resources for building and construction, while maintain the natural character of braided rivers and not adversely affecting water quality, ecosystems or their habitats, access to or the quality of mahinga kai or causing or exacerbating erosion.	Gravel is able to be extracted from riverbeds to maintain flood carrying capacity and to provide resources for building and construction, and extraction takes place in a way that: <ul style="list-style-type: none"> <li>(a) safeguards the natural character of braided rivers, water quality, ecosystems and habitats and access to and quality of mahinga kai; and</li> <li>(b) does not cause or exacerbate erosion.</li> </ul>

## ANNEXURE 2: Comparison of LWRP strategic policies with Te Rūnanga o Ngāi Tahu proposed changes

LWRP	Te Rūnanga o Ngāi Tahu (with further recommended amendments shown)
<p>4.1 Lakes, rivers, wetlands and aquifers will meet the fresh water outcomes set in Sections 6-15. If outcomes have not been established for a catchment, then each type of lake, river or aquifer will meet the outcomes set out in Table 1.</p> <p>4.2 The management of lakes, rivers, wetlands and aquifers will take account of the cumulative effects of land uses, discharges and abstractions in order to meet the fresh water outcomes in accordance with Policy 4.1.</p> <p>4.3 The discharge of contaminants to water or the damming, diversion or abstraction of any water or disturbance to the bed of a fresh water body shall not diminish any values of cultural significance to Ngāi Tahu.</p> <p>4.4 Water is managed through the setting of limits to maintain the life-supporting capacity of ecosystems, support customary uses, and provide for community and stock drinking water supplies, as a first priority and to meet the needs of people and communities for water for irrigation, hydro-electricity generation and other economic activities and to maintain river flows and lake levels needed for recreational activities, as a second priority.</p> <p>4.6 Where a water quality or quantity limit is set in Sections 6-15, resource consents will generally not be granted if the granting would cause the limit to be breached or further over-allocation to occur.</p> <p>4.7 Where over-allocation of water for abstraction from surface water catchments and groundwater zones or nutrient discharges has been determined, a regime will be established in Sections 6-15 that provides methods and a timeframe to eliminate the over-allocation.</p>	<p>4.1 Water quantity and quality is managed through setting, <u>for each catchment</u>, water allocation regimes or limits <del>to manage on</del> the abstraction of fresh water and the discharge of contaminants <del>for each catchment, which to</del> give effect to objectives 1, 2(a) and (b) of this plan <u>and to achieve any fresh water outcomes specified for the catchment in Sections 6-15 within the timeframes specified</u> .</p> <p>4.2 In setting water allocation regimes or limits:</p> <p>(a) Surface water bodies and groundwater are managed as a single resource except where very deep groundwater is unlikely to have a connection to surface water; and</p> <p>(b) Allocation regimes or limits for water quantity and quality are considered together.</p> <p>4.3 Resource consents shall not be granted that will allow activities either singularly or in combination with other activities, to exceed the allocation regime or limits set for that catchment, except where Policy 4.4 applies.</p> <p>4.4 Where the abstraction or water or discharge of contaminants already exceed the allocation regime or limits set under Policy 4.1, resource consents may be granted to:</p> <p><u>(a) Allow the continuation of existing activities at the same or a lesser rate or scale, provided that there is a plan to reduce the over-allocation within a specified timeframe; or</u></p> <p><u>(b) Exceed the allocation limit in the short-term if that exceedance is part of a proposal to reduce the over-allocation in the catchment and that proposal is provided for within the relevant sub-regional section of this plan.</u></p> <p>4.5 Where no allocation regime or limits have been set for abstraction or the discharge of contaminants for a catchment in a sub-regional section of this plan or any other relevant regional plan referred to in the sub-regional section of this plan, then resource consent applications shall be assessed against the fresh water outcomes set out in Table 1 <u>and any effect that granting consent is likely to have on achievement of the outcomes by 2023.</u></p>
	<p>4.6 <del>The cultural landscapes of each catchment shall be identified and provided for in the sub-regional sections of the plan. The cultural values of each catchment, including cultural landscapes that contribute to the natural character of water bodies, shall be identified and provided for in the sub-regional sections of the plan.</del></p>
<p>4.5 In high naturalness waterbodies listed in Sections 6-15, the damming, diverting or taking of water is limited to that for individual or community stock or drinking water and water for the operation and maintenance of infrastructure.</p>	<p>In high naturalness water bodies listed in sections 6-15, the damming and diverting or taking of water is limited to that for individual or community stock or drinking water, to support <del>research purposes or</del> customary uses <u>or to enable research supporting maintenance or enhancement of the water body's natural or cultural values</u>, or the operation or maintenance of existing infrastructure.</p>

LWRP	Te Rūnanga o Ngāi Tahu (with further recommended amendments shown)
<p>4.8 The harvest and storage of water for irrigation or hydro-electricity generation schemes contribute to or do not frustrate the attainment of the regional concept for water harvest, storage and distribution set out in Schedule 16 or the priority outcomes expressed in the relevant ZIP.</p>	<p>Proposals to harvest and store water for irrigation or hydro-electricity generation:</p> <p>(a) Contribute to or do not frustrate Regional or Zone Committee proposals for making irrigation water available to parts of the region or proposals to restore or enhance degraded environments, as set out in the relevant sub-regional sections of this plan; and</p> <p>(b) If supplying irrigation water, the proposal must address any potential effects of the use of water and associated increase in the discharge of contaminants on receiving environments.</p>
<p>4.52 The discharge of water resulting from moving water from one catchment or water body to another does not:</p> <p>(a) facilitate the transfer of fish species, plant pests or unwanted organisms into catchments where they are not already present;</p> <p>(b) adversely affect Ngāi Tahu values;</p> <p>(c) adversely affect the natural character of the receiving water;</p> <p>(d) adversely affect existing drinking water treatment systems to the extent that they are no longer able to effectively treat the water to achieve the standards set out in the Drinking-water Standards for New Zealand; and</p> <p>(e) adversely affect fish migration.</p>	<p>The transfer of water from one catchment <u>or water body to another, either directly or through the discharge of water onto land where it may enter water: as part of any irrigation, hydro-electricity generation or other water infrastructure development:</u></p> <p>(a) Will be undertaken in locations and ways which are acceptable to Ngāi Tahu considering the whakapapa of the catchments involved, any potential effects of transferring or mixing waters on the natural character and ecology of the catchment and the effectiveness of any mitigation measures; <del>and</del></p> <p>(b) Will not result in the transfer of <u>fish species, plant pests or unwanted organisms</u> from one catchments to another; <u>and</u> <del>or</del></p> <p>(c) <u>Will not result in</u> any deterioration in water quality in the receiving catchment..</p>