

M Kennedys' Key Speaking Points & Comments on Issues Arising At WCRC Hearing for Plan Change 1 – Miscellaneous Change N – Sphagnum Moss Harvesting

Process & Recommendations

The process to date has provided a sound opportunity for the resource management matters to be considered and assessed in terms of the sustainability of permitting the harvesting of sphagnum moss within scheduled wetlands. This has included the obtaining of independent ecological advice regarding the potential effects of sphagnum moss harvesting in scheduled wetlands.

I generally support the recommendations of the Section 42A Report in their current form, including the Section 32AA Evaluation and associated Rule 7a. I consider that permitting the harvesting of sphagnum moss in Scheduled wetlands through the adoption of proposed Rule 7a can achieve the relevant objectives and policies of the Regional Land and Water Plan and accordingly the purpose and principles of the Resource Management Act.

Effects of Harvesting

I note that Mr Derks has outlined some key considerations and I consider they are important matters in considering this issue and the potential effects of management of the harvesting of sphagnum moss in scheduled wetlands.

I accept the advice of Mr Derks that proposed Rule 7a is appropriate and will achieve the outcome of sustaining the values of the wetlands within which moss harvesting occurs.

Regional Objectives & Policies

It is my opinion that the proposed permitted rule for harvesting sphagnum moss within scheduled wetlands is consistent with these objectives and policies.

The permitted activity rule allows a reasonable level of control of harvesting to ensure activities are undertaken to an appropriate and consistent standard. This will both sustain the values within a wetland, including the sphagnum moss resource, whilst in some cases assisting to sustain the functioning of the wetland. It is apparent from the ecological information that in some cases the

exclusion of appropriate use and management may result in the loss of values for which wetlands were originally scheduled.

Part II of the Act

In this instance the Regional Land and Water Plan contains existing objectives and policies that are not proposed to be amended through this process. These have been developed to achieve the requirements of Part 2 of the Act.

The proposed Plan Change and associated rule provides for ongoing access to the sphagnum moss resource for the benefit of the industry, and community, whilst setting an appropriate level of control to ensure activities are undertaken in a manner which sustains the values of the wetlands within which those activities occur. This includes, in some instances, provision for the active management of some wetlands through the harvesting process to ensure the wetlands themselves are maintained.

It is my opinion that the current recommendations of the Section 42A Report, including the proposed permitted activity rule (Rule 7a), will assist in ensuring that the permitted harvesting of sphagnum moss from scheduled wetlands achieves the purpose and principals of the Act.

Comment on Issues Arising at Hearing

Regional Functions – Section 30

It is my opinion that the proposal is consistent with the functions of a Regional Council as set out in Section 30 of the Act.

The proposed Plan Change has been initiated by the Council to resolve an outstanding matter which, from the information available, was an unintended consequence of the Environment Court process which saw those wetlands in Schedule 2 added to the Regional Land and Water Plan.

Existing objectives and policies are in place to guide the management of wetlands in the Region and these are not proposed to be changed in the course of the Plan change process.

The potential effects of harvesting on wetlands have been considered, including the effects of not harvesting or managing these areas. The potential effects have also been the subject of an independent review which has assisted the formulation of an appropriate set of standards to ensure effects are managed and the values of the wetlands are sustained. An appropriate level of control, through Rule 7a, is proposed to ensure the functions of the Council are achieved in the management of these wetlands.

National Policy Statement for Freshwater Management 2014 (NPSFM)

I understand that the hearing panel has been referred to Objective A2 of the NPSFM. This however, is not the only objective in Section A of the NPSFM. I will not repeat the wording of the document here as I append the relevant full sections to this summary. My opinion is that the relevant sections of such documents need to be reviewed in full to ensure all matters are considered.

As an example Objective A4 (Water Quality) seeks, *“To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing freshwater quality, within limits.”*

And further Policy A7 (Water Quality) sets, *“By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic wellbeing, including productive economic opportunities, while managing within limits.”*

Similar Objectives and Policies can be found in Section B Water Quantity – see Objective B5 and Policy B8.

The NPSFM also sets a series of national values and uses for freshwater. There are two compulsory national values (Ecosystem health, Human health for recreation) however there are also a range of other values which amongst other things include commercial and industrial uses.

In my opinion the use of wetlands is not precluded in terms of the NPSFM, nor does it place economic use above the need to manage for freshwater values. It does require the potential effects to be considered and appropriate controls put in place to ensure values are appropriately

managed. Based on the information available, including ecological advice, it is my opinion that the proposed Plan Change is consistent with the NPSFM.

Precedence of Chapter 6 of the Plan over Chapters 4 and 5

The requirement in Chapter 6 Wetland Management of the Plan (page 23) to the provisions of Section 6 taking precedence over the provisions of Sections 4 and 5 when dealing with Wetlands has been highlighted. There is no reference to other Chapters of the Plan in that precedent requirement.

It is appropriate in considering this matter, on the basis that there are no changes proposed to Objectives and Policies, to consider other relevant provisions which may guide or direct consideration of relevant resource management matters in the region.

The Plan contains Chapter 3 Natural and Human Use Values which sets a range of objectives and policies in relation to land and water resources. Of relevance in this instance would be;

- Objectives 3.2.1 and 3.2.2
- Policies 3.3.1, 3.3.10, 3.3.11 and 3.3.12

The Plan Change to provide a permitted activity provision for the harvesting of sphagnum moss would be consistent with those provisions in light of;

- the details of the proposed plan change to permit the harvesting of sphagnum moss,
- the ecological evidence and advice,

3. NATURAL AND HUMAN USE VALUES

3.1 Introduction

This Plan recognises the dependence of people and communities on land and water resources and the need for continued use, development, and protection. However, in enabling continued use, development, and protection, it is important that adverse effects on the existing natural and human use values supported on land or by water bodies are avoided, remedied, or mitigated.

This Chapter provides protection for the natural and human use values supported by the West Coast's land resources and water bodies and forms an overarching set of Objectives and Policies to the following Chapters to be taken into consideration during the processing and granting of resource consents.

Schedule 7 identifies particular natural and human use values supported by the West Coast's lakes and rivers.

In addition to the natural and human use values identified in Schedule 7, West Coast water bodies can have other natural and human use values which are protected by the Plan, including natural character, outstanding natural features and landscapes, significant indigenous vegetation and significant habitat of indigenous fauna, existing public access to and along lakes and rivers, historic heritage, and existing lawful uses.

3.2 Objectives

3.2.1 To provide for the sustainable use and development of land and water resources.

Explanation

This Objective recognises that traditionally people have made extensive use of land and water resources and the ability to continue to sustainably use and develop these resources is important.

3.2.2 To protect water bodies from inappropriate use and development by maintaining and where appropriate enhancing their natural and amenity values including natural character and the life supporting capacity of aquatic ecosystems.

Explanation

Many West Coast water bodies contain significant values some of which are identified for specific water bodies in Schedules 7A and 7B of this Plan. These Schedules are not exhaustive. Schedule 7A provides some examples of habitats of threatened species and Schedule 7B identifies those community water supply takes known at the time of drafting this Plan. This Objective not only seeks to avoid the loss or degradation of such values, but also provides for their enhancement.

3.2.3. To maintain or where appropriate enhance the spiritual and cultural values and uses of significance to Poutini Ngāi Tahu.

Explanation

Chapter 2 of this Plan identifies the issues of concern to Poutini Ngāi Tahu. The issues reflect the strong relationship Poutini Ngāi Tahu have with the West Coast's water bodies through their spiritual and cultural values and uses associated primarily with water, and land to a lesser extent. Values and uses are identified for specific water bodies in Schedule 7C of this Plan. This Objective seeks to avoid the loss or degradation of values and uses and, where practicable enhance them. These Schedules are not exhaustive, but reflect the level of knowledge of individual water bodies gained during the Plan-making process.

3.2.4 To avoid or mitigate the exacerbation of any natural hazard or the creation of a hazard.

Explanation

People and communities rely on existing standards of protection from natural hazards, such as flooding, to be maintained or enhanced. Any activity that results in a higher risk of hazard such as flooding, erosion, land instability or sedimentation, or in property damage, could adversely affect infrastructure such as transport routes, the health and safety, and the social, economic, and cultural wellbeing of

people and communities. Where avoidance is not possible, mitigation measures will be considered by Council to manage the adverse effects of the activity.

3.2.5 To provide for new and existing renewable electricity generation activities in the region, including small and community-scale generation by:

- (a) Recognising the national significance of these activities;
- (b) Recognising the national, regional and local benefits associated with these activities;
- (c) Ensuring that the individual and collective generation output of existing and consented renewable electricity generation activities is not reduced;
- (d) Recognising the practical constraints associated with the development, operation, maintenance and upgrading of these activities;
- (e) Recognising the contribution these activities make towards achieving the national renewable electricity generation target.

3.2.6 To enable new technologies using renewable energy resources to be investigated and established in the region.

3.3 Policies

3.3.1 In the management of any activity involving water to give priority to avoiding, in preference to remedying or mitigating:

- (1) **Adverse effects on:**
 - (a) The habitats of threatened species identified in Schedule 7A;
 - (b) Water supply values identified in Schedule 7B;
 - (c) Spiritual and cultural values and uses of significance to Poutini Ngāi Tahu identified in Schedule 7C;
 - (d) The significant natural character of wetlands, and lakes and rivers and their margins;
 - (e) Outstanding natural features and landscapes;
 - (f) Significant indigenous vegetation and significant habitat of indigenous fauna assessed in accordance with Policy 9.2 of the West Coast Regional Policy Statement;
 - (g) Existing public access to and along lakes and rivers;
 - (h) Significant historic heritage;
- (2) **Adverse effects which cause or exacerbate flooding, erosion, land instability, sedimentation or property damage;**
- (3) **Adverse effects on existing lawful uses including regionally significant infrastructure.**

Explanation

The above values of the West Coast's water bodies are matters of national importance under Section 6 of the RMA, plus community water supply values and existing lawful uses. These values can be adversely affected by the following activities:

- (a) Earthworks, including humping and hollowing, flipping, and v-blading;
- (b) Vegetation disturbance;
- (c) Activities in the beds of lakes and rivers;
- (d) The taking damming and diversion of surface water;
- (e) The taking and use of groundwater (which can affect surface water);
- (f) Discharges to land and water.

Some activities can cause or exacerbate hazards and lessen the ability of people and communities to prevent, or protect themselves from the hazard.

When considering these activities, priority must be given to avoiding adverse effects, in preference to remedying or mitigating them. The avoidance of adverse effects on the identified values will be sought in the first instance.

Where adverse effects are considered to be unavoidable, a resource consent may be declined or, if granted, may be subject to conditions requiring unavoidable adverse effects to be remedied, mitigated, or, in the case of diversion, reclamation or damming, to be appropriately compensated for.

When reading 3.3.1(d) and 3.3.1(h) it is important to remember that the degree of natural character, or the value of historic heritage, varies along a continuum (for natural character this will be assessed having regard to the matters in Policy 3.3.6). Where a water body contains significant natural character, or the activity will affect significant historic heritage, preference will be given to avoiding adverse effects of development on that respective value. Giving priority to avoiding adverse effects on the value is more important the higher the significance of the natural character or historic heritage value.

The criteria in Policy 9.2 of the Regional Policy Statement will be used to determine 'significance' in relation to Policy 3.3.1(f). In doing so, it should be recognised that not all of the criteria will be relevant in assessing and determining significance in relation to aquatic ecosystems.

Note: Chapter 6: Wetland Management outlines the management of significant wetlands and their values.

3.3.2 To take into account the benefits from the use and development of renewable energy and associated regionally significant infrastructure (e.g. transmission lines), including the social and economic benefits.

Explanation

This Policy recognises that renewable energy developments and associated infrastructure can provide significant community benefits, both locally and nationally as recognised in Section 7(j) of the RMA and in terms of the National Policy Statement on Electricity Transmission. Where renewable energy developments provide significant community benefits (locally and nationally), it may be sufficient to mitigate or remedy unavoidable effects.

3.3.3 Recognise the location, operational and technical constraints of renewable electricity generation activities when considering resource consent applications for their development, operation, maintenance, and upgrading.

3.3.4 Where the adverse effects of renewable electricity generation activities cannot be practically avoided, remedied or mitigated, consideration shall be given, in determining a resource consent application and imposing any resource consent conditions, to any offset measures and/or environmental compensation offered by an applicant.

3.3.5 Where particular adverse effects of renewable electricity generation activities are either not fully known or uncertain, consideration shall be given, in determining a resource consent application and imposing any resource consent conditions, to the use of adaptive management measures to avoid, remedy or mitigate any adverse effects.

3.3.6 Provide for the development, operation, maintenance and upgrading of small and community scale renewable electricity generation activities where the adverse effects on the environment are avoided, remedied or mitigated.

3.3.7 In the management of any activity involving water, to avoid, remedy, or mitigate adverse effects on:

- (a) Water quality;
- (b) Amenity values;
- (c) Indigenous biological diversity;
- (d) Intrinsic values of ecosystems;
- (e) The natural character of wetlands, and lakes and rivers and their margins, not described in 3.3.1(1)(d); and
- (f) Historic heritage not described in 3.3.1(1)(h).

3.3.8 To recognise Poutini Ngāi Tahu's interests by promoting opportunities for their involvement in resource consent processing.

Explanation

Poutini Ngāi Tahu are provided with information on all resource consents. Poutini Ngāi Tahu may be treated as an affected party with regards to some applications, and may be notified of publically notified

applications. This will allow Poutini Ngāi Tahu to assess the implications of each resource consent application on their spiritual and cultural values, and uses as they relate to land and water.

3.3.9 To recognise and provide for the National Water Conservation (Grey River) Order 1991 and the Water Conservation (Buller River) Order 2001.

Explanation

The management of the waters protected under national water conservation orders must also be recognised and provided for under this Plan. The Plan and any consents granted under it cannot be inconsistent with the water conservation orders. The two water conservation orders are reproduced in Schedules 5 and 6 of this Plan.

3.3.10 To recognise and provide for the following features of water bodies when considering adverse effects on their natural character:

- (a) The topography, including the setting and bed form;
- (b) The natural flow characteristics;
- (c) The natural water level and its fluctuation;
- (d) The natural water colour and clarity;
- (e) The ecology; and
- (f) The extent of use or development within the catchment, including the extent to which that use and development has influenced (a) to (e).

Explanation

The features of water bodies that can contribute to their natural character are identified above. These features need to be taken into account when considering applications for resource consents. New activities will affect water bodies with a high degree of natural character more significantly than they affect highly modified water bodies.

3.3.11 To have particular regard to the following qualities or characteristics of water bodies when considering adverse effects on amenity values:

- (a) Aesthetic values associated with the water body;
- (b) Recreational opportunities provided by the water body;
- (c) Sports fish habitats, as outlined in Schedule 8; and
- (d) The extent of use or development within the catchment, including the extent to which that use and development has influenced (a) to (c).

Explanation

The qualities and characteristics listed above contribute to a water body's amenity values. The nature of amenity values can change over time. The recreational opportunities provided by the West Coast's water bodies can include angling, hunting and a range of other active and passive recreation. These qualities and characteristics must be taken into account when preparing plans under the RMA and when considering applications for resource consents.

3.3.12 To provide for activities that have no more than minor adverse effects on water bodies without the need for a resource consent.

Explanation

The Rules Chapter of this Plan identifies a number of permitted activities that may occur without the need for a resource consent. Providing the permitted activity criteria are met, the activity will have no more than a minor adverse effect.

3.4 Method

- 3.4.1 The Council will provide advice about the likely susceptibility of the location of any proposed structure to flooding, either when a resource consent applicant, or other individual, requests the information, or when a district council requires the information in preparing district plans.

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A. Water quality

Objective A1

To safeguard:

- a) the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water; and
- b) the health of people and communities, as affected by contact with fresh water;

in sustainably managing the use and development of land, and of discharges of contaminants.

Objective A2

The overall quality of fresh water within a freshwater management unit is maintained or improved while:

- a) protecting the significant values of outstanding freshwater bodies;
- b) protecting the significant values of wetlands; and
- c) improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.

Objective A3

The quality of fresh water within a freshwater management unit is improved so it is suitable for primary contact more often, unless:

- a) regional targets established under Policy A6(b) have been achieved; or
- b) naturally occurring processes mean further improvement is not possible.

Objective A4

To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing freshwater quality, within limits.

Policy A1

By every regional council making or changing regional plans to the extent needed to ensure the plans:

- a) establish freshwater objectives in accordance with Policies CA1-CA4 and set freshwater quality limits for all freshwater management units in their regions to give effect to the objectives in this national policy statement, having regard to at least the following:
 - i. the reasonably foreseeable impacts of climate change;
 - ii. the connection between water bodies; and
 - iii. the connections between freshwater bodies and coastal water; and
- b) establish methods (including rules) to avoid over-allocation.

Policy A2

Where freshwater management units do not meet the freshwater objectives made pursuant to Policy A1, every regional council is to specify targets and implement methods (either or both regulatory and non-regulatory), in a way that considers the sources of relevant contaminants recorded under Policy CC1, to assist the improvement of water quality in the freshwater management units, to meet those targets, and within a defined timeframe.

Policy A3

By regional councils:

- a) imposing conditions on discharge permits to ensure the limits and targets specified pursuant to Policy A1 and Policy A2 can be met; and
- b) where permissible, making rules requiring the adoption of the best practicable option to prevent or minimise any actual or likely adverse effect on the environment of any discharge of a contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.

Policy A4 and direction (under section 55) to regional councils

By every regional council amending regional plans (without using the process in Schedule 1) to the extent needed to ensure the plans include the following policy to apply until any changes under Schedule 1 to give effect to Policy A1 and Policy A2 (freshwater quality limits and targets) have become operative:

1. *“When considering any application for a discharge the consent authority must have regard to the following matters:*
 - a. *the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water and*
 - b. *the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.*
2. *When considering any application for a discharge the consent authority must have regard to the following matters:*
 - a. *the extent to which the discharge would avoid contamination that will have an adverse effect on the health of people and communities as affected by their contact with fresh water; and*
 - b. *the extent to which it is feasible and dependable that any more than minor adverse effect on the health of people and communities as affected by their contact with fresh water resulting from the discharge would be avoided.*
3. *This policy applies to the following discharges (including a diffuse discharge by any person or animal):*
 - a. *a new discharge or*
 - b. *a change or increase in any discharge – of any contaminant into fresh water, or onto*

or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.

4. *Paragraph 1 of this policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011.*
5. *Paragraph 2 of this policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2014 takes effect.”*

Policy A5

By every regional council making or changing regional plans to the extent needed to ensure the plans:

- a) identify specified rivers and lakes, and primary contact sites; and
- b) state what improvements will be made, and over what timeframes, to specified rivers and lakes, and primary contact sites, so they are suitable for primary contact more often; or
- c) state how specified rivers and lakes, and primary contact sites, will be maintained if regional targets established under Policy A6(b) have been achieved.

Improvements to specified rivers and lakes in (b) must make a contribution to achieving regional targets established under Policy A6(b).

Policy A6

By every regional council developing regional targets to improve the quality of fresh water in specified rivers and lakes and contribute to achieving the national target in Appendix 6, and ensuring:

- a) draft regional targets are available to the public by 31 March 2018; and
- b) final regional targets are available to the public by 31 December 2018.

Policy A7

By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits.

B. Water quantity

Objective B1

To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming, or diverting of fresh water.

Objective B2

To avoid any further over-allocation of fresh water and phase out existing over-allocation.

Objective B3

To improve and maximise the efficient allocation and efficient use of water.

Objective B4

To protect significant values of wetlands and of outstanding freshwater bodies.

Objective B5

To enable communities to provide for their economic well-being, including productive economic opportunities, in sustainably managing fresh water quantity, within limits.

Policy B1

By every regional council making or changing regional plans to the extent needed to ensure the plans establish freshwater objectives in accordance with Policies CA1-CA4 and set environmental flows and/or levels for all freshwater management units in its region (except ponds and naturally ephemeral water bodies) to give effect to the objectives in this national policy statement, having regard to at least the following:

- a) the reasonably foreseeable impacts of climate change;
- b) the connection between water bodies; and
- c) the connections between freshwater bodies and coastal water.

Policy B2

By every regional council making or changing regional plans to the extent needed to provide for the efficient allocation of fresh water to activities, within the limits set to give effect to Policy B1.

Policy B3

By every regional council making or changing regional plans to the extent needed to ensure the plans state criteria by which applications for approval of transfers of water take permits are to be decided, including to improve and maximise the efficient allocation of water.

Policy B4

By every regional council identifying methods in regional plans to encourage the efficient use of water.

Policy B5

By every regional council ensuring that no decision will likely result in future over-allocation – including managing fresh water so that the aggregate of all amounts of fresh water in a freshwater management unit that are authorised to be taken, used, dammed or diverted does not over-allocate the water in the freshwater management unit.

Policy B6

By every regional council setting a defined timeframe and methods in regional plans by which over-allocation must be phased out, including by reviewing water permits and consents to help ensure the total amount of water allocated in the freshwater management unit is reduced to the level set to give effect to Policy B1.

Policy B7 and direction (under section 55) to regional councils

By every regional council amending regional plans (without using the process in Schedule 1) to the extent needed to ensure the plans include the following policy to apply until any changes under Schedule 1 to give effect to Policy B1 (allocation limits), Policy B2 (allocation), and Policy B6 (over-allocation) have become operative:

1. *When considering any application the consent authority must have regard to the following matters:*
 - a. *the extent to which the change would adversely affect safeguarding the life-supporting capacity of fresh water and of any associated ecosystem and*
 - b. *the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.*
2. *This policy applies to:*
 - a. *any new activity and*
 - b. *change in the character, intensity or scale of any established activity – that involves any taking, using, damming or diverting of fresh water or draining of any wetland which is likely to result in any more than minor adverse change in the natural variability of flows or level of any fresh water, compared to that which immediately preceded the commencement of the new activity or the change in the established activity (or in the case of a change in an intermittent or seasonal activity, compared to that on the last occasion on which the activity was carried out).*
3. *This policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011.”*

Policy B8

By every regional council considering, when giving effect to this national policy statement, how to enable communities to provide for their economic well-being, including productive economic opportunities, while managing within limits.

Appendix 1: National values and uses for fresh water

COMPULSORY NATIONAL VALUES

Ecosystem health – The freshwater management unit supports a healthy ecosystem appropriate to that freshwater body type (river, lake, wetland, or aquifer).

In a healthy freshwater ecosystem ecological processes are maintained, there is a range and diversity of indigenous flora and fauna, and there is resilience to change.

Matters to take into account for a healthy freshwater ecosystem include the management of adverse effects on flora and fauna of contaminants, changes in freshwater chemistry, excessive nutrients, algal blooms, high sediment levels, high temperatures, low oxygen, invasive species, and changes in flow regime. Other matters to take into account include the essential habitat needs of flora and fauna and the connections between water bodies.

Human health for recreation – In a healthy waterbody, people are able to connect with the water through a range of activities such as swimming, waka, boating, fishing, mahinga kai and water-skiing, in a range of different flows.

Matters to take into account for a healthy waterbody for human use include pathogens, clarity, deposited sediment, plant growth (from macrophytes to periphyton to phytoplankton), cyanobacteria and other toxicants.

OTHER NATIONAL VALUES

Natural form and character – Where people value particular natural qualities of the freshwater management unit.

Matters contributing to the natural form and character of a freshwater management unit are its biological, visual and physical characteristics that are valued by the community, including:

- i. its biophysical, ecological, geological, geomorphological and morphological aspects;
- ii. the natural movement of water and sediment including hydrological and fluvial processes;
- iii. the location of the water body relative to its natural course;
- iv. the relative dominance of indigenous flora and fauna;
- v. the presence of culturally significant species;
- vi. the colour of the water; and
- vii. the clarity of the water.

They may be freshwater management units with exceptional, natural, and iconic aesthetic features.

Mahinga kai – Kai are safe to harvest and eat.

Mahinga kai generally refers to indigenous freshwater species that have traditionally been used as food, tools, or other resources. It also refers to the places those species are found and to the act of catching them. Mahinga kai provide food for the people of the rohe and these sites give an indication of the overall health of the water.

For this value, kai would be safe to harvest and eat. Transfer of knowledge would occur about the preparation, storage and cooking of kai. In freshwater management units that are used for providing mahinga kai, the desired species are plentiful enough for long-term harvest and the range of desired species is present across all life stages.

Mahinga kai – Kei te ora te mauri (the mauri of the place is intact).

For this value, freshwater resources would be available and able to be used for customary use. In freshwater management units that are valued for providing mahinga kai, resources would be available for use, customary practices able to be exercised to the extent desired, and tikanga and preferred methods are able to be practised.

Fishing – The freshwater management unit supports fisheries of species allowed to be caught and eaten.

For freshwater management units valued for fishing, the numbers of fish would be sufficient and suitable for human consumption. In some areas, fish abundance and diversity would provide a range in species and size of fish, and algal growth, water clarity and safety would be satisfactory for fishers. Attributes will need to be specific to fish species such as salmon, trout, eels, lamprey, or whitebait.

Irrigation, cultivation and food production – The freshwater management unit meets irrigation needs for any purpose.

Water quality and quantity would be suitable for irrigation needs, including supporting the cultivation of food crops, the production of food from domesticated animals, non-food crops such as fibre and timber, pasture, sports fields and recreational areas. Attributes will need to be specific to irrigation and food production requirements.

Animal drinking water – The freshwater management unit meets the needs of stock.

Water quality and quantity would meet the needs of stock, including whether it is palatable and safe.

Wai tapu – Wai tapu represent the places where rituals and ceremonies are performed, or where there is special significance to iwi/hapū.

Rituals and ceremonies include, but are not limited to, tohi (baptism), karakia (prayer), waerea (protective incantation), whakatapu (placing of raahui), whakanoa (removal of raahui), and tuku iho (gifting of knowledge and resources for future generations).

In providing for this value, the wai tapu would be free from human and animal waste, contaminants and excess sediment, with valued features and unique properties of the wai protected. Other matters that may be important are that there is no artificial mixing of the wai tapu and identified taonga in the wai are protected.

Water supply – The freshwater management unit can meet people's potable water needs.

Water quality and quantity would enable domestic water supply to be safe for drinking with, or in some areas without, treatment.

Commercial and industrial use – The freshwater management unit provides economic opportunities to people, businesses and industries.

Water quality and quantity can provide for commercial and industrial activities. Attributes will need to be specific to commercial or industrial requirements.

Hydro-electric power generation – The freshwater management unit is suitable for hydro electric power generation.

Water quality and quantity and the physical qualities of the freshwater management unit, including hydraulic gradient and flow rate, can provide for hydro-electric power generation.

Transport and tauranga waka – The freshwater management unit is navigable for identified means of transport.

Transport and tauranga waka generally refers to places to launch waka and water craft, and appropriate places for waka to land (tauranga waka).

Water quality and quantity in the freshwater management unit would provide for navigation. The freshwater management unit may also connect places and people including for traditional trails and rites of passage, and allow the use of various craft.

