

IN THE MATTER of the Resource
Management Act 1991

AND

IN THE MATTER of the submissions and
further submissions by
**Genesis Energy
Limited** on Proposed
Plan Change 4 to the
Canterbury Land and
Water Regional Plan

STATEMENT OF EVIDENCE OF RICHARD JOHN MATTHEWS

29 JANUARY 2016

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1. INTRODUCTION

Qualifications and Experience

- 1.1 I hold a Master of Science (Hons) degree, and have been working as a resource management adviser for more than thirty years, initially in the local government sector and since 1999 in private practice with the environmental consulting practice, Mitchell Partnerships Limited. I am a partner in this practice.
- 1.2 My specialist area of expertise is in the application of the Resource Management Act 1991 ("**RMA**" or "**the Act**"), and other relevant environmental management legislation, the development of Regional and District Plans and the acquisition and assessment of resource consent applications.
- 1.3 In relation to statutory planning, I have been involved in the preparation and audit of plans and policy statements since the passing of the RMA. This has involved detailed analyses of plan provisions, assisting Councils to prepare planning documentation, preparation of submissions, presentation of evidence at hearings, and provision of advice regarding the lodging and resolution of Environment Court references. I have participated in several Council hearings relating to policy and plan development, and have attended a number court-assisted and council initiated mediation sessions.
- 1.4 I have been asked to present evidence to this hearing in relation to the Genesis Energy Limited ("**Genesis Energy**") submissions and further submissions in respect of the Proposed Plan Change 4 ("**PC4**") to the Land and Water Regional Plan ("**LWRP**").

Scope of Evidence

- 1.5 In my evidence I will:
- Discuss the overall RMA framework within which the specific Genesis Energy submissions should be considered;
 - Introduce the matters covered by the Genesis Energy submissions on PC4;

- Discuss the matters Genesis Energy has raised in its submissions relating to PC4, and make comment on how they are addressed in the Section 42A report¹ recommendations; and
- Conclude my evidence.

1.6 I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note and that I agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions I express.

2. BACKGROUND TO SUBMISSION

2.1 Genesis Energy is an electricity generator and energy retailer with approximately 1648 MW of installed generation capacity and more than half a million retail customers. Genesis Energy owns and operates the Tekapo Power Scheme in the upper Waitaki Valley.

2.2 The Tekapo Power Scheme sits at the head of the Waitaki Valley and comprises the Tekapo A (25MW) and Tekapo B (160MW) power stations, Lake Tekapo and its associated inflows, and the Tekapo Canal. The Tekapo Power Scheme generates approximately 980GWh per annum of renewable electricity (equivalent to the amount of electricity used annually by some 120,000 households). In generating this electricity the Tekapo Power Scheme makes an important contribution to New Zealand's security of electricity supply, particularly in the South Island and in Canterbury which are dependent on hydro-electricity generation.²

2.3 Tekapo Power Scheme has been part of the existing environment of the Waitaki Catchment for many decades, with Tekapo A being commissioned in 1951 and Tekapo B in 1977.

¹ Plan Change 4 to the Canterbury Land and Water Regional Plan, Section 42A Report, Report No. R15/148, December 2015.

² In addition, most of the water entering Lake Tekapo passes through all eight power stations in the Waitaki Power Scheme meaning, in total, Lake Tekapo inflows contribute approximately 7,680 GWh per annum of renewable electricity to the national grid.

2.4 Genesis Energy is interested in PC4 as its provisions may affect the operation, maintenance and further upgrade of the Tekapo Power Scheme.

3. RMA FRAMEWORK

3.1 There are clear statutory requirements in the RMA, and in higher order planning documents to provide for the Tekapo Power Scheme in the LWRP. Of particular relevance are:

- Part 2 of the RMA – its purpose and principles;
- The National Policy Statement on Renewable Electricity Generation (“**NPSREG**”); and
- The Canterbury Regional Policy Statement (“**RPS**”).

Part 2 of the RMA

3.2 The purpose of the RMA is set out in Part 2, section 5:

5. Purpose

- (1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- (2) *In this Act, **sustainable management** means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—*
 - (a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
 - (b) *Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
 - (c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

3.3 The purpose of the RMA is to be given practical expression through all decision making under the Act, including policies, plans, and resource consents.

3.4 Section 5 requires an overall consideration as to whether a proposal promotes the sustainable management of natural and physical resources. In the context of section 5, the following matters are of particular relevance when considering the electricity generation infrastructure in the Waitaki Catchment:

- The Waitaki Catchment hydroelectricity generation schemes are nationally significant longstanding “physical resources” that have been part of the existing environment since first work began on the Waitaki Dam in the 1930s, and they are subject to the principle of sustainable management;
- The Waitaki Catchment hydroelectricity generation schemes enable people and communities (locally, regionally and nationally) to provide for their social, economic and cultural wellbeing and for their health and safety;
- The water abstracted by the schemes is used efficiently, and generates electricity within multiple power stations;
- The Waitaki Catchment hydroelectricity power schemes form a substantial body of renewable electricity generation, contributing, on average, 25% of New Zealand’s renewable electricity generation;
- The Waitaki Catchment hydroelectricity power schemes are of national significance in providing security of supply to New Zealand’s electricity network, particularly in the South Island. The Waitaki based schemes alone provide approximately 60% of New Zealand’s controllable hydro storage capacity;
- Electricity is a vital resource for New Zealand. There can be no sustainable management of natural and physical resources without energy, of which electricity is a major component;
- If the operations of the Waitaki Catchment hydroelectricity power schemes are constrained, including restricting their access to water, it

will adversely affect the ability of the schemes to generate electricity;
and

- The Waitaki Catchment hydroelectricity power schemes, including the Tekapo Power Scheme, are subject to a detailed operational regime that robustly addresses their effects on the environment.

3.5 The critical role of electricity in providing for the wellbeing of people and communities has been recognised by the Environment Court, for example:

*Electricity is a vital resource for New Zealand. There can be no sustainable management of natural and physical resources without energy, of which electricity is a major component.*³

*From a national level, electricity is an essential commodity to New Zealand households (directly they spend in excess of \$2 billion on it) and industry. It provides the basis for our economic prosperity and way of life. Unlike in some other countries, electricity cannot be imported, and for some purposes it has no practical alternatives.*⁴

3.6 Similarly, the Environment Court has stated the full utilisation of generation facilities is in the national interest.⁵

3.7 I also note that the William Young in the Court of Appeal decision relating to the Tongariro Power Development, a hydroelectric power scheme that is similarly of national importance, observed that:⁶

It is, for instance, inconceivable that the Environment Court considered that the TPD should cease operating at the expiry of its ten-year consent. So the key issue was mitigation.

3.8 In my opinion, it is therefore as important to recognise and provide for electricity generation activities within a planning instrument, such as PC4, as it is to provide for the range of other matters specifically identified in Sections 6, 7 and 8 of the RMA. Sections 6, 7 and 8 of the RMA set out the principles to be applied in achieving the purpose of the Act and state:

³ Genesis Power Limited v Franklin District Council [2005] NZRMA 541 at [64]

⁴ Rotokawa Joint Venture Ltd and Mighty River Power Ltd v Waikato Regional Council (A41/07) at [422]

⁵ Ngati Rangi Trust v Manawatu-Wanganui Regional Council (A67/04) at [402]

⁶ Ngati Rangi Trust v Genesis Power Ltd, Court of Appeal decision CA518/07, 2 June 2009.

6 Matters of National Importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

- (a) *The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
- (b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
- (c) *The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- (d) *The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*
- (e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.*
- (f) *The protection of historic heritage from inappropriate subdivision, use, and development.*
- (g) *The protection of recognised customary activities.*

7. Other Matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

- (a) *Kaitiakitanga:*
- (aa) *The ethic of stewardship:*
- (b) *The efficient use and development of natural and physical resources:*
- (ba) *the efficiency of the end use of energy:*
- (c) *The maintenance and enhancement of amenity values:*
- (d) *Intrinsic values of ecosystems:*
- (e) *Repealed.*
- (f) *Maintenance and enhancement of the quality of the environment:*
- (g) *Any finite characteristics of natural and physical resources:*
- (h) *The protection of the habitat of trout and salmon:*
- (i) *The effects of climate change:*
- (j) *The benefits to be derived from the use and development of renewable energy.*

8. Treaty of Waitangi

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

3.9 The principles contained in sections 6, 7 and 8 are subordinate to the overall purpose of the Act. Each plays a part in the overall consideration of whether the purpose of the Act has been achieved in a particular situation. These matters are not an end in themselves; they are an accessory to the principal

purpose. This hierarchy applies to all of the principles set out in sections 6, 7 and 8 of the RMA.

- 3.10 In the overall framework of Part 2, I consider that electricity (and therefore the generation of electricity) is an essential component of enabling people and communities to provide for their social and economic well-being, and for their health and safety. Providing for the use and development of natural resources (and in particular, renewable energy resources) for electricity generation purposes must be given significant weight in policy development.

National Policy Statement on Renewable Electricity Generation

- 3.11 The NPSREG came into effect on 13 May 2011 and identifies the need to develop, upgrade, maintain and operate renewable electricity generation activities throughout New Zealand as a matter of national importance. The overarching objective of the NPSREG states:

To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.

- 3.12 In particular, Policy B of the NPSREG states:

Decision-makers shall have particular regard to the following matters:

- a) *maintenance of the generation output of existing renewable electricity generation activities can require protection of the assets, operational capacity and continued availability of the renewable energy resource; and*
- b) *even minor reductions in the generation output of existing renewable electricity generation activities can cumulatively have significant adverse effects on national, regional and local renewable electricity generation output; and*
- c) *meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities.*

- 3.13 This policy clearly points to the maintenance of existing generation output as a key step toward meeting the national target for generation of electricity from renewable sources, and emphasises that even small reductions in generation

output can compromise reaching that national target. Decision makers, including those for PC4, are to have particular regard to these matters when making decisions affecting renewable electricity generation resources such as those forming the Tekapo Power Schemes and renewable energy resources in Canterbury river systems.

3.14 Under section 67(3) of the RMA the LWRP must give effect to the NPSREG. The need to “give effect to” the NPSREG requires the LWRP to “positively implement” the NPSREG. The key matters contained in the NPSREG in respect of existing hydroelectricity generation facilities which must be positively implemented by the LWRP are that the NPSREG:

- Makes the operation, maintenance and upgrading of existing renewable electricity generation activities and the benefits of that generation matters of national significance;
- Acknowledges that the maintenance of generation output from existing activities may require the protection of those assets, their operational capacity, and the continued availability of the renewable resource on which they rely;⁷
- Requires particular regard be had to managing the effects of renewable electricity generation in a manner which allows for the operational requirements of those facilities;⁸ and
- Requires the LWRP to include objectives, policies and methods to provide for the operation, maintenance and upgrading of existing hydroelectricity generation facilities.⁹

3.15 The objectives and policies introduced by PC4 must give effect to the NPSREG. Positively implementing the NPSREG requires that an appropriate level of protection be afforded to the operation of existing hydroelectricity generation infrastructure in the catchment, including the Tekapo Power Scheme, and that it

⁷ NPSREG, Policy B a) and b).
⁸ NPSREG Policy C1
⁹ NPSREG, Policy E2.

enables the operation, maintenance, development and upgrading of that infrastructure.

Canterbury Regional Policy Statement

3.16 The LWRP must also give effect to the RPS, as must PC4 to the LWRP. In that regard, the RPS includes the following provisions which are of particular relevance when considering the existing hydroelectricity generation infrastructure:

Policy 5.3.9 – Regionally significant infrastructure (Wider Region)

...

Methods

The Canterbury Regional Council:

Will:

- (1) *Set out objectives and policies, and may include methods in regional plans which:*
 - (a) *provide for regionally significant infrastructure by reducing constraints on their efficient and effective operation, maintenance and upgrade.*
 - (b) *avoid development that may impact on regionally significant infrastructure*
 - (c) *avoid, remedy or mitigate the adverse effects of regionally significant infrastructure on the environment.*

Policy 7.3.11 – Existing activities and infrastructure

...

Methods

The Canterbury Regional Council:

Will:

- (1) *Set out objectives and policies, and may include methods in regional plans (including environmental flow and water allocation regimes) that:*
 - (a) *Recognise and provide for the continuation of existing hydro-electricity and irrigation schemes and other existing water takes, uses, damming and diversions, which involve substantial investment in infrastructure, as appropriate; and*
 - (b) *Require these existing activities to make on-going improvements in water efficiency and reductions in adverse environmental effects, as appropriate, including through reviewing conditions on resource consents.*

Policy 16.3.3 – Benefits of renewable energy generation facilities

...

Methods

The Canterbury Regional Council:

Will:

- (1) *Set out objectives and policies, and may include methods in regional plans that recognise the local, regional and national benefits of a renewable energy supply, including security of supply, providing for electricity capacity, and assisting in meeting international climate obligations.*

Policy 16.3.5 – Efficient, reliable and resilient electricity generation within Canterbury

...

Methods

The Canterbury Regional Council:

Will:

- (1) *Set out objectives and policies, and may include methods in regional plans to:*
- (a) *avoid activities on the beds of lakes and rivers, and uses and developments that impact on the generation capacity from, and/or the maintenance and upgrading of consented and existing electricity generation infrastructure; and*
 - (b) *provide for the full operation, and maintenance and/ or upgrading of, existing generation infrastructure;*
 - (c) *provide for activities associated with the investigation, identification and assessment of potential sites and energy sources for electricity generation;*
 - (d) *enable the upgrading of existing and establishment of new electricity generation infrastructure within the coastal marine area and in the beds of lakes and rivers, while avoiding, remedying or mitigating adverse effects including through the use of best practice approaches to design, construction and effect management.*

3.17 Section 67(3)(c) of the RMA requires that PC4 must “give effect to” the RPS. Giving effect to the RPS does not require repeating each and every provision in the LWRP. However, the LWRP does need to positively implement the prescriptive and clear directions contained in the above RPS provisions. In my opinion, this includes, for example, positive measures to recognise Policy 7.3.11, Method (1) (a)¹⁰ and Policy 16.3.5, Method (1) (b)¹¹.

4. SUBMISSION MADE BY GENESIS ENERGY ON PC4

4.1 Genesis Energy lodged a submission and further submissions in relation to provisions in PC4, and in principle supported the provisions in the LWRP which provide greater certainty around structures that are essential for existing hydroelectricity generation infrastructure. I comment further on some of the specific submission points in my evidence below.

4.2 Genesis Energy proposed amendments to Proposed Policy 4.85A. The first of these sought the following:

¹⁰ “Recognise and provide for the continuation of existing hydro-electricity and irrigation schemes and other existing water takes, uses, damming and diversions, which involve substantial investment in infrastructure, as appropriate”.

¹¹ “Provide for the full operation, and maintenance and/ or upgrading of, existing generation infrastructure”.

4.85A Canterbury's braided river systems indigenous biodiversity, and habitats of indigenous fauna and flora is protected, and the natural character is preserved of Canterbury's braided river systems is preserved through:

(a) *preventing encroachment of activities into the beds and margins of lakes and rivers; and*

(b) *limiting vegetation clearance within the bed, banks and margins of lakes, rivers, wetlands or coastal lagoons*

...

4.3 The amendments proposed by Genesis Energy, above, have been made for the purpose of remaining consistent with s6(a) and s6(c) of the RMA, in providing for protection of indigenous flora and fauna and preservation of natural character. Sections 6(a) and 6(c) state:

6 Matters of National Importance

...

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

...

(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

...

4.4 I consider that these amendments give effect to s6(a) and s6(c) of the RMA and the terminology proposed by Genesis Energy is appropriate for the protection of indigenous flora and fauna and preservation of natural character support them.

4.5 Additionally Genesis Energy proposed the following amendments to Proposed Policy 4.85A:

unless the ~~vegetation clearance~~ activity is for the purpose of pest management, habitat restoration, flood control purposes, the operation, maintenance or repair of structures, including renewable hydro-electricity generation assets or network utilities, or maintenance of public access.

4.6 The Genesis Energy concern is that the term “network utilities” does not include or encompass electricity generation infrastructure, and is limited to such matters as water pipelines, transmission lines or roading. In response to submissions such as that from Genesis Energy, the section 42A report recommends that “network utilities” be replaced with “infrastructure”:

unless the vegetation clearance is for the purpose of pest management, habitat restoration, flood control purposes, the operation, maintenance or repair of structures or infrastructure ~~network utilities~~, or maintenance of public access.

- 4.7 While the term “infrastructure” is not defined in the LWRP, I have considered the way in which the term is used in the Plan and what it refers to. In that regard, I understand that the term “infrastructure” encompasses renewable hydro-electricity generation assets. On that basis, the amendment of network utilities to infrastructure would address Genesis Energy’s submission point. I therefore support the relief proposed within the section 42A report regarding Proposed Policy 4.85A.
- 4.8 Genesis Energy supports the retention of the proposed amendments to Rules 5.135, 5.136, 5.137, 5.140A, 5.141 and 5.141A. The section 42A report also supports the retention of these rules, noting the proposed amendments and addition to Rule 5.140A within the section 42A report. I consider that these rules and the proposed amendments and addition to the rules are appropriate.
- 4.9 The amendments proposed by Genesis Energy to Rules 5.163(9), 5.167(6) and 5.168(5) also recognise the activities required to be carried out in Canterbury’s braided river systems in relation to renewable hydro-electricity generation activities. I support the amendments proposed by Genesis Energy to these rules. I note that vegetation growth can interfere with the efficient operation of renewable hydro-electricity network utilities, and therefore may require clearing.
- 4.10 The section 42A report does not address this aspect of the Genesis Energy submission, while the alteration of the definition of vegetation clearance to exclude maintenance of infrastructure does not address the use of land for vegetation activities that Rules 5.163, 5.167 and 5.168 relate to.
- 4.11 For consistency and to provide for important infrastructure operation and maintenance, I consider that the word “network utilities” in Rules 5.163, 5.167 and 5.168 should be replaced with “infrastructure” (as recommended in the section 42A report for Policy 4.85A), and that an exclusion for activities for the purpose of the operation, maintenance or repair of infrastructure is added to Rules 5.163(9), 5.167(6) and 5.168(5). I propose changes to these rules as set out in red text in Appendix One.

5. CONCLUSION

- 5.1 Overall, I support the provision of greater certainty for operators of hydro-electricity activities in the LWRP, which can be achieved through the amendments I have outlined above. I consider that these changes are in accordance with and give effect to the RMA, NPSREG and Canterbury RPS.

Richard Matthews

29 January 2016

APPENDIX ONE

Proposed changes to the notified version of Rules 5.163, 5.167 and 5.168 are shown in red text below:

5.163 The introduction or planting of any plant, or the removal and disturbance of existing vegetation in, on or under the bed of a lake or river and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity, provided the following conditions are met:

1. The activity does not prevent access to lawfully established structures, including flood protection works, or to flood control vegetation; and
2. No vegetation used for flood control or bank stabilisation is disturbed, removed, damaged or destroyed ~~except by or on behalf~~ without the prior written permission of the person or agency responsible for maintaining that vegetation for flood control purposes; and
3. No woody vegetation is disposed of in, on, over or under the bed of a lake or river other than for in situ decomposition of sprayed weeds that were growing in, on, over or under the bed; and
4. Introduction or planting of vegetation in, on, or under the bed of any lake or river is not of a species listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy; and
5. Introduction or planting of vegetation in, on, or under the bed of any river or lake listed as a high naturalness waterbody in Section 6 to 15 is only of indigenous plant species that naturally occur in the catchment; and
6. ~~The disturbance, removal, damage or destroying of any plant or vegetation~~ Vegetation clearance in, on, or under the bed of any river or lake listed as a high naturalness waterbody in Sections 6 to 15 is only of:
 - (a) non-indigenous species; or
 - (b) indigenous species that form the understorey of plantation forest that is being harvested and a minimum 5 m set back from the river or lake is provided upon replanting (if replanting occurs); and
7. ~~Except for clearance around utilities or existing structures, removal of a species listed in the Biosecurity NZ Register of Unwanted Organisms or the Canterbury Pest Management Strategy, or clearance for the purposes of maintaining existing fence lines, vehicle tracks, firebreaks, drains, ponds, dams or crossings, the activity~~ Vegetation clearance does not occur in an inanga or salmon spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the period of 1 January to 1 June inclusive; and
8. In a flood control rating district scheme area, the introduction or planting of any plant, ~~is by or on behalf~~ has the prior written permission of the person or agency responsible for maintaining that vegetation for flood control purposes; and
9. From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the vegetation clearance does not result in a reduction in the area or diversity of existing riverbed vegetation unless the activity is for the purpose of the operation, maintenance or repair of infrastructure; and
10. Except in relation to recovery activities, or the establishment, maintenance or repair of network utilities infrastructure and fencing, the

concentration of total suspended solids in the discharge does not exceed:

- (1) 50g/m³ where the discharge is to any Spring-fed river, Banks Peninsula River, or to a lake, except when the background total suspended solids in the waterbody is greater than 50g/m³ in which case the Schedule 5 visual clarity standards shall apply; or
- (2) 100g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m³ in which case the Schedule 5 visual clarity standards shall apply.

5.167 The use of land for vegetation clearance outside the bed of a river or lake or adjacent to a wetland boundary but within:

- (a) 10 m of the bed of a lake or river or a wetland boundary in Hill and High Country land or land shown as High Soil Erosion Risk on the Planning Maps; or**
- (b) 5 m of the bed of a lake or river or a wetland boundary in all other land not shown as High Soil Erosion Risk on the Planning Maps or defined as Hill and High Country on the Planning Maps;**

and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity, provided the following conditions are met:

- 1. Except in relation to recovery activities, the area of bare ground resulting from vegetation clearance:
 - (a) Does not exceed 10% of the area within the relevant ~~setback distance in any site riparian margin~~ at any time; or
 - (b) Is undertaken in accordance with a Farm Environment Plan that has been prepared in accordance with Schedule 7 Part A; or
 - (c) For plantation forestry activities is undertaken in accordance with the Environmental Code of Practice for Plantation Forestry (ECOP) 2007; and
- 2. Except in relation to recovery activities, the vegetation clearance is not on land above 900 m above sea level; and
- 2A. Except in relation to recovery activities, or the establishment, maintenance or repair of ~~network utilities infrastructure~~ and fencing, the concentration of total suspended solids in the discharge does not exceed:
 - (a) 50g/m³ where the discharge is to any Spring-fed river, Banks Peninsula River, or to a lake, except when the background total suspended solids in the waterbody is greater than 50g/m³ in which case the Schedule 5 visual clarity standards shall apply; or
 - (b) 100g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m³ in which case the Schedule 5 visual clarity standards shall apply;
and
- 3. The felling of trees, or any part of a tree, is away from any lake, river or wetland, except where it is not practicable to do so to ensure human safety, and no logs or tree trunks are dragged through or across the bed of a lake or a permanently flowing river, or a wetland; and
- 4. The vegetation clearance does not occur adjacent to a salmon or an inanga spawning site listed in Schedule 17, or undertaken in any inanga spawning habitat during the period of 1 January to 1 June inclusive and
- 5. The vegetation is not flood or erosion control vegetation; and

6. From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the vegetation clearance does not result in a reduction in the area or diversity of existing riparian vegetation, unless the earthworks have been authorised by a land use consent granted by the relevant territorial authority and conditions 1 to 5 above are also met, or the activity is for the purpose of the operation, maintenance or repair of infrastructure.

5.168 The use of land for earthworks outside the bed of a river or lake or adjacent to a wetland boundary but within:

- (a) **10 m of the bed of a lake or river or a wetland boundary in Hill and High Country land or land shown as High Soil Erosion Risk on the Planning Maps; or**

- (b) **5 m of the bed of a lake or river or a wetland boundary in all other land not shown as High Soil Erosion Risk on the Planning Maps or defined as Hill and High Country;**

and any associated discharge of sediment or sediment-laden water in circumstances where sediment may enter surface water is a permitted activity provided the following conditions are met:

1. Except in relation to recovery activities, or the establishment, maintenance or repair of ~~network utilities infrastructure~~ and fencing, the extent of earthworks within the ~~riparian margin relevant setback distances in any property:~~

- (a) does not at any time exceed:

- (i) an area of 500 m², or 10% of the area, whichever is the lesser; or
(i) a volume of 10m³ on land shown as High Soil Erosion Risk on the Planning Maps; or

- (b) Is undertaken in accordance with a Farm Environment Plan that has been prepared in accordance with Schedule 7 Part A; or

- (c) For plantation forestry activities is undertaken in accordance with the Environmental Code of Practice for Plantation Forestry (ECOP) 2007 and the NZ Forest Road Engineering Manual (2012); and

2. Except in relation to recovery activities or the establishment, maintenance or repair of ~~network utilities infrastructure~~ and fencing, ~~the concentration of total suspended solids in the discharge does not exceed any discharge of sediment associated with the activity into the water in a river, lake, or the Coastal Marine Area does not exceed 8 hours in any 24 hour period, and does not exceed 24 hours in total in any 6 month period; and~~

- (1) 50g/m³ where the discharge is to any Spring-fed river, Banks Peninsula River, or to a lake, except when the background total suspended solids in the waterbody is greater than 50g/m³ in which case the Schedule 5 visual clarity standards shall apply; or

- (2) 100g/m³ where the discharge is to any other river or to an artificial watercourse except when the background total suspended solids in the waterbody is greater than 100g/m³ in which case the Schedule 5 visual clarity standards shall apply;
and

3. The activity does not occur adjacent to a significant spawning reach for salmon or an inanga spawning site area listed in Schedule 17; ~~or in any inanga spawning habitat during the period of 1 January to 1 June inclusive; and~~

4. Except in relation to recovery activities or the establishment, maintenance or repair of ~~network-utilities~~ infrastructure and fencing, any earthworks or cultivation is not within 5 m of any flood control structure; and
5. From 5 September 2015, and within the bed of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata, and the Waitaki rivers the earthworks do not result in a reduction in the area or diversity of existing riparian vegetation, unless the earthworks have been authorised by a land use consent granted by the relevant territorial authority and conditions 1 to 4 above are met, or the activity is for the purpose of the operation, maintenance or repair of infrastructure.