BEFORE THE ENVIRONMENT COURT
AT CHRISTCHURCH

ENV-2010-CHC-115, 123, 124 AND 135

IN THE MATTER	of Appeals pursuant to Section 120 of the Resource Management Act 1991
BETWEEN	**WEST COAST ENT INC**
	Appellant
AND	**ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INC**
	Appellant
AND	**WHITE WATER NEW ZEALAND INC**
	Appellant
AND	**DIRECTOR GENERAL OF CONSERVATION**
	Appellant
AND	**WEST COAST REGIONAL COUNCIL AND BULLER DISTRICT COUNCIL**
	Respondents

....Continued over leaf

STATEMENT OF EVIDENCE OF ROBIN COCHRANE RHODES DELAMORE

Draft as at 22/05/2012

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AND	**MERIDIAN ENERGY LIMITED**
	Applicant
AND	**FRIDA INTA**
	Section 274 Party
AND	**WHANAU PIHAWAI WEST – RICHARD WAYNE BARBER AND IRI MAY BARBER-MILNER**
	Section 274 Party
AND	**J MacTAGGART**
	Section 274 Party
AND	**ORION ENERGY NZ LTD, ALPINE ENERGY LTD, MAIN POWER NZ LTD AND ELECTRICITY ASHBURTON LTD**
	Section 274 Party
AND	**NZ RAFTING INC**
	Section 274 Party
AND	**ANN SHERIDAN**
	Section 274 Party
AND	**BULLER ELECTRICITY**
	Section 274 Party

STATEMENT OF EVIDENCE OF ROBIN DELAMORE

TABLE OF CONTENTS

Note: this draft evidence is not complete, and has been developed on the basis of the draft evidence of technical witnesses for the Director General of Conservation. The wording and references used may therefore not reflect the final briefs of evidence for those witnesses.

INTRODUCTION

1. My full name is Robin Cochrane Rhodes Delamore. I am a resource management consultant, based in Christchurch. I hold the qualification of MSc (Resource Management) from Canterbury University, and have 30 year's experience in resource management and planning. These include 7 years as a council planning committee member, 13 years as a planner and senior planner with the Department of Conservation in Auckland and Canterbury, 2 years overseas as an advisor to a biodiversity and sustainable forestry project in Laos, and 7 years as a resource management consultant including appointments as a hearings commissioner.

2. My planning experience spans freshwater, marine and terrestrial resource management issues and has encompassed assessments and investigations, the development of plans and policy documents, and the consideration of resource consents. I have considerable expertise in management of the effects of use and development on indigenous vegetation and habitat, wetlands and other water bodies, natural character, landscape, and amenity.

3. In recent years I have gained particular experience in renewable energy projects. I was Team Leader for the Department of Conservation in relation to Meridian Energy's Project Aqua on the lower Waitaki River and had over two years involvement in developing mitigation conditions for that project, in consultation with Meridian Energy. In 2006 I was asked to undertake an independent assessment of Meridian's North Bank Tunnel hydro project for the Department, and in 2007 provided planning evidence at hearings on the Trust Power Arnold hydro development project. I gave planning evidence to the council

hearing on the proposed Mokihinui river hydro- electricity project (MHP) in 2009, and in 2010 provided evidence at the Environment Court hearing on the proposed Wairau hydro-electricity projects. I was also involved with Environment Court appeals on the proposed Project West Wind and Taharoa C wind farms in the North Island.

4. Other major water related projects and hearings have included: resource consent applications for the Opuha dam, proposals to divert water from Lake Tekapo to the Opihi River, the Rangitata Water Conservation Order, catchment plans for the Opihi, Ashburton and Waimakariri rivers, identification of biodiversity issues and enhancement proposals for Canterbury Water Management Strategy process, and water quality discharge hearings.

5. I have contributed to the development of criteria for assessing significance in terms of section 6 (c) of the Resource Management Act ('the RMA') at the local, regional and national levels. From 2005-2007 I was a member of the policy drafting team on the Proposed New Zealand Coastal Policy Statement 2008.

6. I am a certified hearings commissioner, and have participated in ten resource consent hearings over the last 6 years, including two as chairman.

7. I have been asked by the Department of Conservation to provide planning evidence to this hearing on applications for resource consents for the proposed Mokihinui Hydro Proposal (MHP) and associated transmission lines.

8. I am familiar with the proposed hydro dam site and its associated construction and staging zone, the area that would be inundated by the proposed reservoir, and the transmission corridor, as well the areas proposed for environmental compensation. I visited the site of the proposed dam in April 2008 and walked up the Mokihinui gorge as far as Andersons Flat. In July of that year I flew by helicopter along the length of the proposed transmission corridor, over the Glasgow range, through the Mokihinui gorge and over much of the upper catchment, including the full length of the North and South branches of the river. Landings took place at Johnny Cake Creek in the gorge, at Forks Hut, and on Mt Misery. In February 2012 I visited the proposed Waimangaroa Bush compensation area. On 31 March 2012 I visited the proposed dam site and walked a short distance up the pack track to view the improvement work being undertaken by the Mokihinui-Lyell Backcountry

Trust for the Old Ghost Road project. On 1 April I flew up the gorge as far as the new hut site at Specimen Creek, and from there rafted back down the river, stopping at various points.

9. My evidence will address planning and resource management issues arising from the actual and potential effects of the MHP and the proposed transmission route, taking into account the mitigation and compensation proposed.

10. In preparing this evidence I have reviewed the decision of the Hearing Commissioners, the AEE, the Statement of Issues dated March 2011 filed by the Respondents, the relevant planning and policy documents, and all the evidence of the witnesses for:
    - the Director General of Conservation,
    - Meridian Energy,
    - the respondents,
    - other parties to the hearing where noted.

    Where is rely on other information, I have referenced this at the appropriate page.

11. I have read the Environment Court's Code of Conduct for Expert Witnesses, and I agree to comply with it. I confirm that the issues addressed in this brief of evidence are within my areas of expertise.

12. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed. I have specified where my opinion is based on limited or partial information and identified any assumptions I have made in forming my opinions.

13. My opinions rely in part on the evidence presented by Patricia Harte

SCOPE OF EVIDENCE

14. My evidence covers the following matters:
    - The status of the application, and relevant matters to be considered.
    - The potential effects of the proposal and the mitigation and compensation proposed.
    - Relevant plan provisions.

- Assessment in terms section 104D of the RMA.
- Consideration under section 104, including Part II RMA matters.
- Overall assessment and conclusions.

KEY FINDINGS AND OPINIONS

15. The MHP is a non-complying activity under the Buller District Plan: specifically because the height and area of the dam, the destruction of the historic pack track, and the effects of activities within riparian margins fall outside the standards for discretionary activities. It is also likely that the overall activity of constructing a hydro electricity generation plant is non-complying because that activity is not provided for in the Plan, in terms of Rule 7.9.1.1.

16. The district and regional consents must therefore be "bundled" together as non-complying activities for consideration under section 104D of the RMA. In my opinion, both the district and regional plan objectives and policies are relevant to this consideration

17. The receiving environment at and above the dam site is largely unmodified, and has a high degree of naturalness includes areas that are outstanding natural features and landscapes in terms of section 6(b) of the RMA, and significant areas of indigenous vegetation and habitat in terms of section 6(c) of the RMA. The proposed dam and reservoir are largely located on land protected under the Conservation Act.

18. The MHP will give rise to both positive and adverse effects. The principle positive effects that arise are the generation of electricity from renewable resources to meet regional and national demand, an overall reduction in greenhouse gas emissions, reduced transmission costs, and the potential for a reduction in power prices on the West Coast. However the MHP does not appear to be necessary to meet national or regional demand for electricity or to reduce greenhouse gas emissions, as other renewable generation projects are available, and demand for electricity is currently flat. In particular, proposed generation projects that have been consented on the West Coast (some of which are now on hold) could give rise to similar positive effects to those advanced for the MHP.

19. The MHP would have a wide range of adverse effects on the life supporting capacity of the Mokihinui River, aquatic and terrestrial ecology and habitat, natural character, landscape and amenity values.

20. A number of conditions have been offered by Meridian to address the adverse effects that arise from the MHP. Several of these conditions (notably the Biodiversity Enhancement Strategy and the protection of Waimangaroa Bush) are termed offsets and considered to be mitigation by Meridian witnesses, but are in fact compensation provisions. The enhancement strategy does not provide like for like offsets, and may not be as effective as claimed. Crucially, the amount of additional habitat enhancement that it provides may be limited, if additional habitat restoration work is undertaken in the catchment by the Department of Conservation.

21. The actual and potential adverse effects on landscape, natural character, aquatic ecosystems, significant areas of indigenous vegetation and habitat, heritage and amenity values are more than minor and, cannot be mitigated or offset.

22. Because of the scale of these effects, the MHP is contrary to a number of key objectives and policies in the BDP and Regional Plans. It therefore does not meet either of the Section 104D "gateway tests".

23. The MHP may not be consistent with section 107 of the RMA in that the discharge of anoxic water, or water to water has the potential to give rise to significant adverse effects on aquatic life in the lower river

24. In relation to the section 104 assessment, the MHP is largely inconsistent with the relevant plans and the West Coast RPS, and the objectives of the National Policy Statement for Freshwater, and partly inconsistent with the New Zealand Coastal Policy Statement. The MHP is entirely consistent with the National Policy Statement for Renewable Energy, and largely consistent with the New Zealand Energy Strategy, but inconsistent with the New Zealand Biodiversity Strategy. The proposed scheme is not anticipated by the West Coast Conservation Management Strategy and would not be consistent with the relevant outcomes for the area in that strategy.

25. When assessed against Part II of the RMA, the MHP is not consistent with section 6(a), (b), (c), (d) and (f), and a number of section 7 matters, although it is consistent with several section 7 matters relating to renewable energy.

26. Because of the range and level of adverse effects associated with the MHP that cannot be avoided remedied or mitigated, the proposed scheme would not sustain the potential of the Mokihinui river and catchment to meet the reasonably foreseeable needs of future generations, or safeguard the life-supporting capacity of its water, soil, and ecosystems.

27. In my opinion the MHP is not necessary to provide for peoples social and economic wellbeing, and for their health and safety, and I therefore conclude that, overall, it is not consistent with the sustainable management purpose of the RMA.

STATUS AND RELEVANT MATTERS FOR CONSIDERATION

28. The MHP requires resource consents under section 9, 13, 14 and 15 of the RMA. I understand that resource consent has already been granted for coastal protection works for mitigation purposes at the Mokihinui river mouth. While these consents form part of the permitted baseline, I do not consider that they can be considered part of the existing environment as they would only be exercised if consent is granted for the MHP. Consents are required under the rules in the Proposed Water Management Plan, the Proposed Regional Land and Riverbed Management Plan, the Regional Plan for Discharges to Land, the Regional Air Quality Plan, and the Buller District Plan (BDP). I am in agreement with Mr Kyle and Mr Crystal that the status of the individual consents under the Regional Plans are generally **discretionary**, and with Ms Montgomery that consents for the construction of the dam and flooding of the pack track are **non-complying** under the BDP.

29. I agree with Ms Harte that as the "activity" of electricity generation or hydro electricity generation is not specifically referred to in the Buller District Plan, the activity (as a whole) may therefore be a **non-complying activity** under rule 7.9.1.1. I discuss below the potential for activities associated with the MHP that are within the riparian zone or affect wetlands to also be non-complying in respect of the BDP.

30. Given the scale of the proposal, its overall non-complying activity status, and the absence of provisions under the BDP objectives, policies or rules for hydro-electricity generation projects within Buller District, I am also in agreement with Ms Harte that the MHP may have been more appropriately considered through a plan change.

31. Case law under the RMA has established that, where there are multiple consents associated with an application, the more stringent activity classification applies to the whole application [*Locke v Avon Motor Lodge Ltd (1973) 4 NZTPA 17*]. The Environment Court has also found that this "bundling" of consents applies where applications involve both district and regional council consents [*Tairua Marine Limited v Waikato Regional Council* A108/05]. This case involved regional consents for dredging (non-complying) and reclamation (discretionary) and parking and recreational activities on the reclamation that required district consents as discretionary activities. The Court determined that all the consents should be considered non-complying. This decision was upheld by the High Court [CIV-2005-485-1490]. That Court stated:

It is a long-standing principle that where there is an overlap between two consents so that the consideration of one may affect the outcome of the other it will generally be appropriate to treat the applications as one requiring overall assessment on the basis of the most restrictive activity

The High Court found that that there was overlap between the regional and district consents and a "holistic approach" was required to their assessment

32. All of the MHP consents overlap and form part of a development project that requires overall consideration. The individual district and regional plan consents must be bundled and considered under the most restrictive activity status, which is non-complying.

33. Under section 104D of the RMA a consent authority may grant consent for a non-complying activity only if it is satisfied that the adverse effects of the activity are minor, or that the application is for an activity that will not be contrary to the objectives and policies of the relevant plan or proposed plan. These are sometimes referred to as "threshold" or "gateway" tests. Where there is a plan and proposed plan, the objectives and policies in both plans need to be considered (section 104 D (b) (iii)). If a proposed activity would have effects that are more than minor and is contrary to the objectives and policies of the relevant plan it must be declined.

34. In assessing the level of effects under section 104D(a), a number of decisions of the Court have established that the mitigation offered can be taken into account, but not positive effects including environmental compensation . In *Stokes v Christchurch City Council* [C 108/99], the Court stated (at page 434) in respect of section 105 (2A) (a) - now section 104(D) (a) - that:

…we consider that while it is still appropriate to consider each adverse effect as mitigated, there is no statutory authority for us to consider the positive effects of a proposal when deciding whether the threshold test in Section 105(2A)(a) is met.

This reasoning was followed by the Court in their decision on the TrustPower Wairau hydro- electricity proposal [*Director General of Conservation and others v Marlborough District Council* NZEnvC 403 2010, at paragraph 701-703].

35. Activities that provide environmental compensation cannot therefore be considered as mitigation, and cannot be taken into account under section 104D(1) (a), but they can be considered as positive effects and taken into account and weighed up against the adverse effects associated with the MHP, under section 104 and Part II.

36. The MHP consent applications are a non-complying activity by virtue of Rule 7.9.1.2 in the BDP, that states:

Any activity which is not specifically referred to in the Plan or does not fall within the limits of permitted, controlled or discretionary activities is deemed to be a non-complying activity and will require a resource consent.

37. The specific matters that result in the proposal being non-complying are:

- The dam height and floor area exceed the standards for discretionary activities in Table 5.7 under Rule 5.2.3.
- Under rule 7.9.7.2.1, the MHP would result in the destruction of part of the pack track which is listed as a historic item in Part 14 of the Plan (Reference 96).

38. I consider that the MHP also fails to comply with the Riparian Margin standards and riparian margins for rivers and streams in Table 5.7 under Rule 5.2.3, as the proposed scheme involves: a range of activities associated with the construction and operation of the dam, or the inundation of the gorge within these margins and Rule 5.3.2.6 does not provide for most of these activities. On the basis of Dr Lloyd's finding that the lower part of the turf zone in the gorge constitutes wetland vegetation under the definition in the RMA

(paragraph 5.4.4), the MHP would also appear to fall outside the standards for natural wetlands in Table 5.7 under Rule 5.2.3, as from my observation from the river these turf zone areas in the gorge would total more than .5ha in area. In my opinion, the relevant MHP land use consents would also be non-complying under these rules .

39. In addition, as Ms Harte has identified in her evidence, there is no reference in the BDP to the overall activity of constructing and operating a hydro electricity power scheme in terms of Rule 7.9.1.2 . I agree with her that that this appears to trigger a requirement for a land use consent for the overall development as a non-complying activity.

40. Under section 104D (b) the BDP is the relevant plan in respect of the district council land use consents. As the individual regional consents must also be bundled as non-complying activities, it is my view that the regional plan that triggered the requirement for a particular resource consent becomes the relevant plan in terms of section 104D (b). I discuss the reasons for this when I assess the MHP in terms of section 104D below.

41. If the application passes one of the threshold tests under section 104D it must then be assessed under section 104 of the RMA. Relevant matters to be considered under section 104 (1) include the actual and potential effects of the allowing the activity, and the provisions of the district and regional plans, the West Coastal Regional Policy Statement), and the National Policy Statements for Freshwater Management and Renewable Electricity Generation. Because the application has effects on the coastal environment, the New Zealand Coastal Policy Statement must also be considered. I consider that other relevant matters include the proposed National Policy Statement for Indigenous Biodiversity and the non-statutory New Zealand Energy Strategy, the New Zealand Biodiversity Strategy, the West Coast Conservation Management Strategy. The permitted baseline may also be considered in terms of section 104 (2). Section 104 is, of course, subject to Part II of the RMA.

42. The approach I have followed below is to review the actual and potential effects of the proposed MHP, including the mitigation and environmental compensation offered. I then consider the relevant plan provisions and the permitted baseline, as these are relevant to both section 104D and 104. After assessing the application and reaching conclusions under section 104D, I review the MHP against the remaining policy documents and other

matters under section 104, section 107, and the provisions of Part II of the RMA. I then provide an overall assessment and conclusions on the application in terms of sections 104D, 104, 107 and part II of the Act.

ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT AND THE PROPOSED MITIGATION AND COMPENSATION

The environment

43. Under section 104(1) and 104D, the actual potential effects on the environment of allowing the activity must be assessed. This raises an issue as to what constitutes the "relevant environment". In my view, there are two environments affected by the MHP, the local or receiving environment where most of the adverse effects arise, and the broader environment (district, regional and national) where positive effects from the development of hydro electricity generation may potentially accrue. This approach is consistent with the finding of the Environment Court in *Meridian Energy and others v Wellington City Council* [WO31/2007] – the "West Wind case" – where the Court assessed a renewable energy project separately against both environments.

44. In my opinion, the local or receiving environment affected by the MHP is primarily the land and water resources that fall within the footprint of the dam and proposed reservoir; the Mokihinui river and its associated natural processes including hydrology, sediment transfer, and ecological functioning; the river mouth, adjacent coastal areas and coastal processes affected by damming the river; and the transmission corridor. However, landscape, natural character, ecological, habitat and amenity considerations mean that there are interconnections between these areas and the wider Mokihinui catchment, and the latter could also be considered to form part of the receiving environment.

45. In terms of the existing environment , the evidence of the witnesses for both Meridian Energy and the Director General of Conservation indicates that the Mokihinui river, gorge and upper catchment is largely unmodified, and has a high degree of naturalness. The landscape evidence identifies these areas as outstanding natural features and landscapes in terms of section 6(b) of the RMA, and the ecological evidence identifies significant areas of indigenous vegetation and habitat in terms of section 6(c) of the RMA. Apart from small areas of crown riverbed and road reserve, land in the gorge and upper catchment is all

located on land protected under the Conservation Act (see Figure One)., Existing activities in the gorge and wider catchment are largely restricted to small scale commercial and informal recreational activities and management activities such as predator and browser control and maintenance of recreational facilities. The Buller District Plan makes no special provisions that anticipate development in this part of the District, and I am not aware of any unexercised consents, other than those potentially associated with the MHP.

46. In terms of the future environment, the provisions of the West Coast Conservation Management Strategy (CMS) – which establishes the planning and management framework for conservation lands in the area - and the evidence of the Director General only contemplate minor changes to activities within the catchment, These include the development of the Old Ghost Road walking and cycling track, huts and bridges, as well as an associated increase in the level of recreational activity. There is also the potential for increased management effort to occur around the protection of biodiversity values within the Priority Management Area identified in the CMS (see Figure One), as well as sites identified in the evidence of Dr Leathwick. Without the MHP it is my view that, apart from these activities and any changes that may of arise out of natural events, the future environment of the Mokihinui gorge and catchment is likely to be largely identical to that which exists today.

47. The existing environment of the relatively small area of the catchment below the gorge is more modified as a result of mining, land clearance, and farm development, and includes areas of private land. There is a small bush lot subdivision on the road to the gorge above Seddonville, and on my reading of the District Plan, there is the potential for some additional residential subdivision and/ or development, forestry and farming development to occur in this part of the District in the future. Much of the river flats are in developed pasture, and there are small settlements at Seddonville and Mokihinui, as well as minor coastal protection works on the river near the river mouth, and on the seaward side of the Mokihinui settlement. However, apart from minor gravel extraction activities in the past, the river itself appears to be largely unmodified.

48. On the basis of the ecological evidence, parts of the transmission corridor have high natural values but sections have also been modified by forestry in the catchments of Chasm Creek and Charming Creeks. There are significant existing and future impacts from mining and

associated activities along sections of the corridor on the Stockton Plateau. In the future, it is likely that mining will expand to other parts of the Stockton plateau that are traversed by or adjacent to the transmission corridor, but some areas with high conservation values will remain.

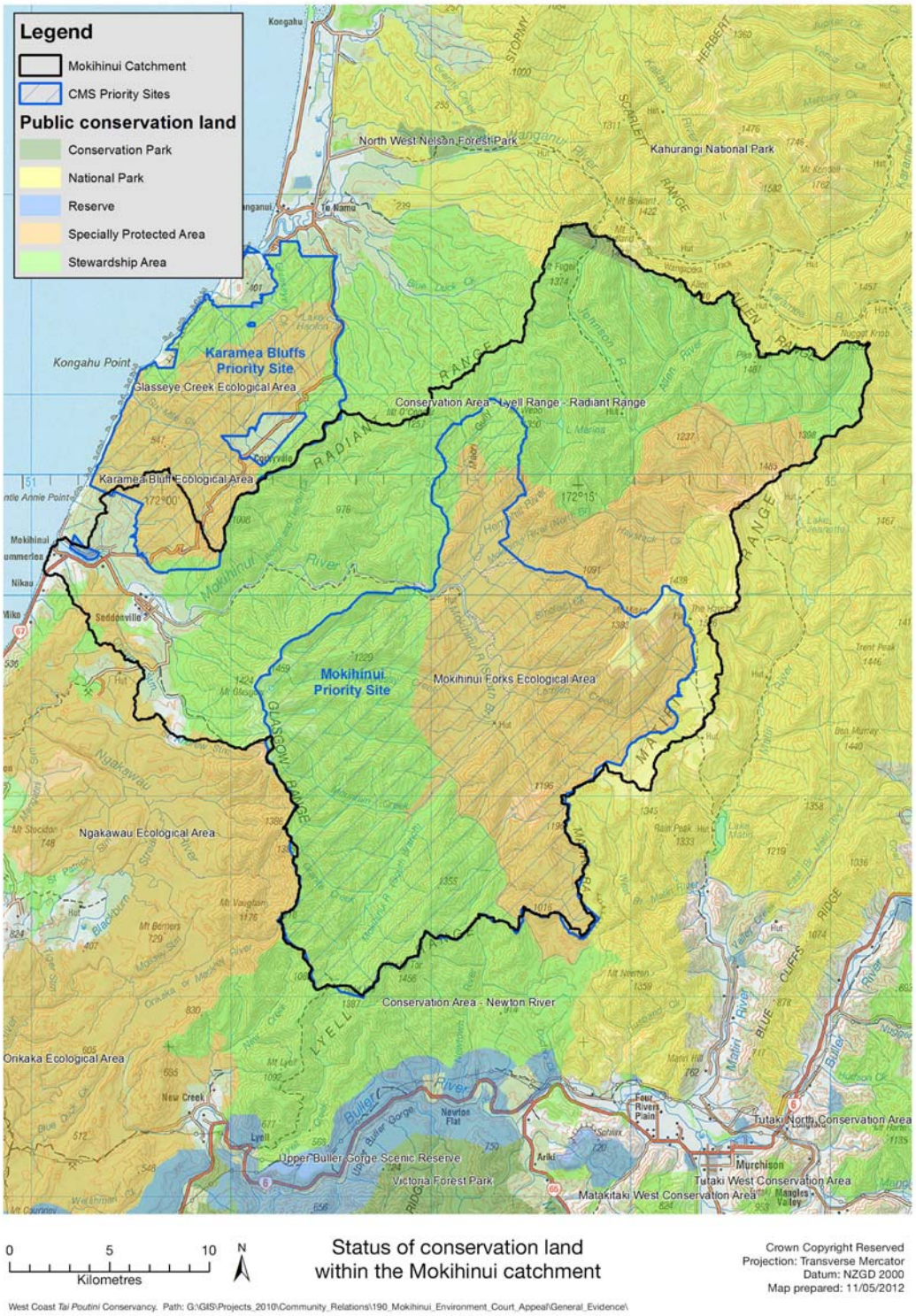

Figure 1: Mokihinui catchment

Positive effects

49. On the basis of the evidence Mr Heaps, Mr Smales, Mr Highet, Mr Barry, Mr Truesdale, Mr Copeland, Mr Kyle, and Mr Page the principle positive effects or outcomes that are considered to arise from the MHP are:

- The production of 100 MW, or an average of 386GWh of renewable electricity, which would contribute to regional and national demand for energy.
- A reduction in overall greenhouse gas emissions from electricity generation in New Zealand, by reducing the future need for electricity generation from non-renewable sources.
- Improvements to the security of electricity supply on the West Coast.
- Deferral of transmission investments.
- A reduction in the losses associated with the transmission of electricity to the West Coast.
- A reduction in wholesale prices of electricity on the West Coast.
- Employment and other economic benefits associated with the construction and operation of the hydro-electric power scheme, and associated mitigation and compensation projects.
- Proposed biodiversity offsets.

50. The extent to which these matters constitute positive effects, and the weight to be placed on them is a matter of some significance for this hearing. In my opinion the key issues that need to be considered are: whether the MHP is necessary to achieve the above outcomes (particularly at the national level), and the degree to which alternative sources of renewable generation (or energy conservation) could:

- provide for projected levels of electricity demand both regionally and nationally, and
- deliver similar cost and emission savings to those claimed for the MHP, and
- be able to be achieved with lower environmental costs.

51. In terms of alternative sources of generation to the 100MW that would be provided by the MHP, the Electricity Authority's Generation Update for September 2011[1] lists generation

[1] 2011, Electricity Authority; Generation Update: http://www.ea.govt.nz/search/?q=generation+update

projects which are currently under construction, have received consent or have applied for consent within New Zealand. Removing Project Hayes (for which consents have subsequently been withdrawn), the total estimated generating capacity of these projects is 5323MW. This can be compared with the installed generation capacity in 2011 of approximately 10,000MW[2].

52. The Ministry of Economic Development (MED) publishes figures on the Long Run Marginal Cost (LRMC) for new generation projects[3]. The MED data indicates that, along with several hydro projects including the MHP, a number of cost effective wind and geothermal generation projects are available nationally.

53. Dr Clough notes in his evidence that this LRMC data provides "an extensive array of potential generation prospects that could be alternatives to MHP" (paragraph 58). In the same paragraph he also reports on an assessment using the Electricity Authority's Generation Expansion Model to look at the mix and cost of new generation with and without MHP included. Over a 30 year period to 2040, the model showed very little change in overall generation costs between the with and without MHP model runs.

54. Mr Heap's evidence (paragraphs 24-41) identifies potential generation projects including a number of new projects known to the Electricity Authority that are additional to those in the 2011 Generation Update. Mr Heaps considers that, in total generation capacity of these potential projects can be considered to be at least equal to current installed generating capacity, and the rate at which new electricity generation potential is being added to the 'highly likely' list of generation projects means there are several scenarios under which additional supply can be available to meet future demand (paragraph 32). Mr Heaps concludes that MHP is not essential to achieving the Government's target of 90% of electricity generated by renewable energy sources by 2025, or to ensuring future national electricity supply security for at least the next 15 years, because there are alternative options (paragraph 44).

55. On the basis of Mr Heap's and Dr Clough's evidence the MHP does not appear to be necessary to meet future increases in demand for renewable electricity generation at the

[2] Electricity Authority, 2011; Electricity in New Zealand.
[3] MED, 2011: Interactive Electricity Generation Cost Model 2011

national level, or to reduce or offset carbon emissions from other generators, as alternative renewable generation projects are available.

56. Transpower's annual planning report[4] estimates demand for electricity on the West Coast at 77MW in 2011 rising to 93MW in 2021 (page 268). The report identifies that there is currently 20MW of generation capacity on the West Coast, but notes that construction of the 6 MW Amethyst hydro project is currently underway and is expected to be operational by 2013 (page 270).

57. Electricity is mainly transmitted to the West Coast via 110kV transmission lines from Kikiwa down the Buller and Grey valleys[5]. Some transmission loads into the West Coast region are fed from the south via the 66 kV circuits from Lake Coleridge[6]. Power generated at the TrustPower Coleridge Hydro scheme is therefore available for transmission to the West Coast. While Coleridge is located east of the main divide, it is closer to the Greymouth - Hokitika area (the most heavily populated part of the West Coast) than the proposed MHP.

58. A number of hydro electricity generation projects have been proposed for the West Coast. The Lake Rockfort scheme (Kawatiri Energy) with a planned capacity of 4.2 MW is currently under construction near Waimangaroa. Consents have been granted for the proposed TrustPower hydro-electric power scheme on the Arnold, which would have a generating capacity of up to 46 MW of power and an output of around 200 GWh per annum. However, TrustPower have recently put the Arnold Scheme "on hold" until the economics of the scheme are more attractive[7].

59. The proposed HDL hydro-electricity scheme on the Stockton Plateau has also been consented and if developed would have a capacity of up 60MW and an output of 220GWh per annum. An alternative hydro-electricity scheme proposed by Solid Energy on the Stockton Plateau has recently received resource consent from the Environment Court. This would have a capacity of 38MW and an annual output of 180 GWh. TrustPower has applied for resource consents to upgrade the existing McKays Creek and Kaniere Forks

[4] Transpower NZ Ltd, 2011: Annual Planning Report.
[5] [5] Electricity Authority, 2011; Electricity in New Zealand.
[6] Transpower NZ Ltd, 2011: Annual Planning Report.
[7] The Otago Daily Times, 15 May 2012: "West Coast hydro scheme shelved"

Hydro Electric Power Schemes, which would result in an additional 3MW of generating capacity[8]. West Power are also investigating a 20MW hydro generation facility on the Waitaha River in South Westland.

60. On the basis of the TransPower planning report, these projects have the potential to supply a significant proportion of the electricity consumed on the West Coast. Overall there appears to be the capacity to meet the existing and projected demand to 2021 and beyond from existing or proposed renewable electricity generation sources within the region, without recourse to the MHP.

61. In relation to security of supply, and transmission deferral issues, Mr Heaps considers that the MHP is not essential to maintain secure West Coast electricity supply, as Transpower has an obligation to ensure that the transmission meets the Grid Reliability Standards (paragraphs 74,107) He also considers that it is likely that the MHP will:

- Not enable the deferral of the planned transmission reactive support investments planned for 2015, because these will be need to be constructed before the MHP is built;
- Note lead Transpower to defer planned major grid upgrades to the West Coast region expected to be needed by the mid to late 2020s, as generation will not always be available as an alternative to transmission;
- Not provide benefits in terms of reducing the number and frequency of transmission outages in the West Coast region due to transmission system-related unplanned interruptions (paragraph 107).

Based on Mr Heap's evidence, it is my opinion that the security of supply and deferral of transmissions upgrades advantages that are claimed as positive effects for the MHP cannot be given much weight.

62. I agree that the MHP would reduce transmission losses, and that there is the potential for this to result in lower prices for electricity consumers on the West Coast. Mr Highet has estimated these savings to be in the order of $50 per annum per consumer, and he considers that there will be overall savings from both reduced transmission coast and increased competition totalling around $300 per annum (paragraph 3.9) However, on the

[8] West Coast Regional Council, 2011: Public notification of resource consent applications - McKays Creek and Kaniere Forks Hydro Electric Power Schemes.

issue of lower prices I note that Dr Clough had the following to say in respect of the operation of the electricity market and the MHP: *Knowing that its main rival volume suppliers are 500 kilometres or more away, it has incentive to lower its prices no more than necessary to price out this competition, or alternatively to withhold its volume offering to admit some higher cost generation at the margin to receive the higher marginal price* (paragraph 50). He goes on to say that, because of its size, the MHP could *create conditions that will deter further investment in new generation, and occupy a position where it can, within limits, set its own price* (paragraph 52). Dr Clough's evidence indicates that the benefits arising from a reduction in costs may be largely captured by Meridian as a producer surplus, rather than by consumers. I therefore consider that there is considerable uncertainty around claims that the MHP will result in lower prices for consumers on the West Coast.

63. Even if the benefits were largely captured by Meridian, I consider that a reduction in transmission costs would be a positive effect arising from the MHP, as in a national context this would reduce the overall amount of electricity that would need to be generated. If other West Coast generation projects identified above were to proceed these could also bring about a reduction in transmission losses, and potentially a benefit to West Coast consumers, and I assume that this would "dilute" (possibly significantly) any transmission cost reductions for the West Coast associated with the MHP. However, even if this were the case, there would still potentially be transmission loss benefits from the MHP for both West Coast and Tasman and Marlborough consumers (if power from the MHP was exported to those areas).

64. I accept that there would be some positive economic effects for the West Coast economy arising from the construction and operation of the MHP.

65. Based on the evidence of Dr Clough, Mr Heaps I consider that the positive effects claimed for electricity generation from the MHP are overstated by the applicant. While the MHP could contribute to meeting demand for renewable electricity generation, and to reducing greenhouse gas emissions, it is not necessary to achieve these outcomes: alternative generation projects (including local generation options) are available. From my knowledge of the electricity generation sector, many of these projects could have lower environmental costs as they would utilise water resources that are already modified, or would involve

technologies such as wind and geothermal that are more easily reversible and potentially have a significantly lower environmental impact than the proposed MHP. On the evidence of Mr Heaps, the MHP is also not necessary to address security of supply issues on the West Coast, and is unlikely to result in transmission investments being deferred. It would result in a reduction in transmission losses (and potential cost savings for consumers), but alternative generation projects could give rise to similar positive effects for the West Coast.

66. Other positive effects identified by Meridian's experts are the creation of a lake ecosystem and recreational amenity (associated with the reservoir), and the proposed environmental compensation proposals. As Mr Whitwick has pointed out in his evidence, it is not clear what demand exists for flat water kayaking or power boating in the Buller District. What additional advantages the reservoir would provide over the lower Buller River is also not clear from the evidence. The creation of the proposed reservoir would give rise to a number of significant adverse effects, which are discussed below, and in my opinion, it would not constitute a positive effect overall. I discuss the environmental compensation projects below.

Adverse effects

67. Based on the evidence of the technical witnesses for Meridian Energy and the Director General of Conservation, the principle adverse effects associated with the MHP can be summarised as follows:

- Loss or modification of natural river flows, sediment transport, river bed processes, and aquatic habitat in the Mokihinui gorge and the section of the river between the gorge and the sea (Evidence of Dr Hicks, Dr Kelly, Dr Hudson, Dr Death, Dr Schallenberg, Dr Allibone, Dr Todd, and Dr Williams).
- A loss of connectivity through the river system and impacts on its ecological functioning and habitat values for indigenous fish, including whitebait (Evidence Dr Allibone, Dr Kelly, Dr Shaw, Dr Leathwick, Dr Shaw, Mr Tim Shaw, Mr Willie Shaw, and Mr Ned Norton).
- The potential for an anoxic discharge of hyplimnetic water from the proposed storage reservoir, and for algal blooms and greenhouse gas emissions associated with the reservoir (Evidence of Dr Schallenberg, Mr James).

- Destruction of significant gorge riparian turf communities, and seep and stream habitat in the gorge containing unusual invertebrate and bryophyte species, some of which may be new to science (Evidence of Dr Lloyd, Dr Shaw, Dr Suren, Dr Kilroy, Mr Ned Norton, Dr Leathwick, Mr Willie Shaw, Dr Death,) .
- Loss of approximately 300ha of significant indigenous vegetation and habitat for indigenous fauna (including threatened species) through inundation (Evidence of Dr Lloyd, Dr O'Donnell, Ms Walker, Dr Powlesland, Dr Shaw, Dr Leathwick, Dr David Norton, Dr van Meeuwen-Djkgraaf, Dr Lanford, Mr Parkes).
- Loss of habitat and displacement of threatened blue duck and grey duck in the gorge (Mr Tim Shaw, Dr Powlesland, Mr Willie Shaw, Dr David Norton, Mr Parkes).
- Destruction or modification of indigenous vegetation and habitat (including habitat for threatened species) at the dam construction and staging site, and in localised areas along the transmission corridor (Evidence of Dr Lloyd, Dr David Norton, Dr Powlesland, Dr O'Donnell, Ms Walker, Dr Gruner, Mr Overmars).
- Flooding of the historic pack track and other historic sites through the gorge, and the loss of associated heritage and amenity values (Evidence of Ms Barr, Ms Watson, and Mr Whitwick).
- Impacts on the v natural character, outstanding landscape, and amenity values of the Mokihinui gorge and catchment arising from the construction of the dam and associate vegetation clearance and earthwork, the flooding of the gorge, and the construction of the proposed new access track. (Evidence of Mr Lister, Mr Brown, Mr Rough, Mr Whitwick),
- Impacts on landscape and amenity values arising from the development of the staging area, construction activities, the development of the transmission line, and access roads (Evidence of Mr Lister, Mr Rough, Dr David Norton, Mr Whitwick).
- A loss of existing recreational opportunities associated with the gorge and river, and impacts on recreation user's experience. (Evidence of Mr Greenaway, Mr Whitwick, Dr Allibone).
- Impacts on the coastal environment and an increase in coastal hazards arising from a reduction in sediment supply to the coastal marine area (Dr Hicks, Dr Todd).

68. Based on this evidence and my own assessment these adverse effects would be significant, particularly on: river processes and connectivity, ecology, and habitat values; the high

natural character and outstanding landscape of the Mokihinui gorge; significant indigenous vegetation and habitat for indigenous fauna; and heritage and amenity values, including recreation.

Compensation and mitigation

69. The applicant has offered to partially mitigate or compensate for some of these adverse effects. These proposals are set out in the evidence of Mr Page, and attached to the evidence of Mr Page and Mr Kyle. Several key components are described as biodiversity offsets by the Meridian witnesses. These are the Biodiversity Enhancement Strategy (BES), and the protection of Waimangaroa Bush. In my opinion, there is some confusion around the way in which the term offset is used in the context of the MHP, and whether the proposals constitute mitigation or environmental compensation. For example, Mr Crystal considers that the BES "is able to be seen as mitigation, because it is similar to the values being affected in the gorge, and it is being proposed within the same river catchment" (paragraph 33).

70. The Environment Court has drawn a distinction between activities which are intended to directly mitigate the adverse effects of a particular proposal, and those that provide environmental compensation (see *JF Investments v Queenstown Lakes District Council* C48/ 2006). At paragraph 8 in that decision the Court defined environmental compensation as

any action (work, services, or restrictive covenants) to avoid, remedy or mitigate adverse effects of activities on the relevant area, landscape, or environment as compensation for the unavoided and unmitigated adverse effects of the activity for which consent is being sought.

71. The proposed National Policy Statement for Indigenous Biodiversity (PNPSIB) defines Biodiversity Offset as meaning:

measurable conservation outcomes resulting from actions which are designed to compensate for more than minor residual adverse effects on biodiversity, where those affects arise from an activity after appropriate prevention and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground with respect to species composition, habitat structure and ecosystem function.

This is similar to the definition of biodiversity offset used in the Standard on Biodiversity Offsets[9] developed for the Business and Biodiversity Offsets Programme (BBOP), by the BBOP Advisory Group.

72. I note that the Board of Inquiry into the New Zealand Transport Agency Transmission Gully Plan Change Request recorded in their decision at paragraph 246:

We agree with the end position of NZTA that offsetting is a subset of remedying or mitigating effects. Ultimately there was general agreement that compensation did not constitute offsetting…

However, this appears to be inconsistent with its earlier statements in its decision.

73. In my opinion, offsetting could potentially form part of both mitigation or compensatory actions, depending on the context. The Court in *JF Investments* noted that normal conditions to avoid, remedy or mitigate the adverse effects of an activity do not supply environmental compensation (paragraph 8). Therefore, if offsetting associated with the MHP was to fall within in the ambit of a "normal condition" - for example directly addressing inundation effects - it could constitute mitigation. An example would be the relocation of blue duck, which is an offset condition directly related to the loss of habitat through inundation.

74. The proposed BES is based around browser and predator control to improve habitat values in a proposed Biodiversity Enhancement Area (BEA) that encompasses much of the South Branch and gorge area in the Mokihinui catchment. The focus of the BES is therefore on addressing adverse effects within the BEA (the impacts of introduced browsers and predators) that are unrelated to the unmitigated effects of the MHP on biodiversity and other values within the gorge (inundation). Therefore, in my opinion the BES offset would constitute environmental compensation under the Court's definition above.

75. Ms Montgomery considers that "a significant part of the Upper Catchment Proposal (BES) consists of like-for-like offset and as such can be considered to be mitigation or remediation of adverse effects of the proposal" (paragraph 94). On the basis of the evidence of Dr Leathwick, Dr O'Donnell, Dr Norton, Mr Ned Norton, and Dr Lloyd, I disagree that the Biodiversity Enhancement Area (BEA) is like-for-like because many significant fauna values are "non-offsettable", there are differences between the forest

[9] Business and Biodiversity Offsets Programme (BBOP). 2012. Standard on Biodiversity Offsets. BBOP, Washington, D.C. – page 13.

communities and habitats of the inundation area and the upper catchment, and the BES does not compensate for the loss of significant aquatic and terrestrial habitats that have been identified in the gorge, or impacts on the ecological functioning of the river. On the evidence of Dr van Meeuwen-Djkgraaf, the offset model of Dr Ussher that has been used to develop the enhancement strategy is not consistent with any of the BBOP principles, and it is Dr Langford's conclusion that:

The analysis encoded in the offset accounting model is neither transparent, nor robust, nor science-based. Dr. Ussher's conclusion that it will lead to large net gains for biodiversity is not substantiated by the evidence presented (paragraph 75).

76. I also do not consider that the BES can be considered mitigation because it is a work that is intended to remedy the adverse effects of exotic browsers and predators in another part of the catchment as compensation for the un-avoided and unmitigated adverse effects of inundation of the gorge by the MHP..

77. In my opinion, the enhancement strategy may provide a positive effect in terms of the biodiversity values within the BEA. However, on the evidence of Dr O'Donnell, Dr Leathwick, Dr Lloyd, Mr Willie Shaw and Mr Tim Shaw, and Ms Walker, the current design of the strategy may not be effective, and these positive effects may be over-stated. Dr O'Donnell considers that the benefits to fauna of the predator control regime suggested remains unproven, Mr Tim Shaw considers that the BEA would be incapable of supporting the Blue Duck population proposed in the BES, and it is Dr Lloyd's opinion that the upland forests and grasslands in the proposed BEA do not appear to be greatly affected by pest browsing animals. The benefits arising from the BES are also very dependent on degree of additional habitat enhancement ("additionality") that would be provided over and above the existing and proposed browser and predator control programmes carried out by the Department of Conservation and other parties. On the evidence of Mr Ferell, there are already existing control programmes for predators and browsers within the proposed BEA, and Dr Leathwick considers that it is likely that the Department will be carrying out additional habitat enhancement work within the sites he has identified in the catchment. Based on this evidence, it is my opinion that the degree of additionality provided by the BES (and therefore the extent to which it constitutes a positive effect) is likely to be limited.

78. The proposed protection of Waimangaroa Bush as an "offset" would also constitute environmental compensation in terms of the Court's definition above. On the basis of the evidence of Dr David Norton, Mr Willie Shaw, Dr Leathwick and Dr Lloyd I consider the protection of Waimangaroa Bush would be a positive effect because it would result in the legal and physical protection of a significant area of indigenous vegetation. However, on the evidence of Dr Lloyd, while the composition of Waimangaroa Bush has a degree of similarity to some forest types within the gorge, it has a different structure, and is located on a different landform/and climate type. It therefore does not constitute a "like for like" exchange in terms of the significant communities and habitats destroyed within the inundation area, and would not constitute "trading up" in terms of the ecological and biodiversity values that would be lost as a result of the MHP.

79. The principle mitigation conditions proposed for the MHP are:

- A "trap and transfer" system to allow a proportion of the population of some migratory native fish species to by-pass the dam upstream.
- Modifications to flow discharges during the whitebait season.
- Intake structures and management of discharges to assist downstream migration of long fin eels.
- Creation of a new walking and mountain bike access track and associated interpretative signage up the Mokihinui gorge, to partially replace the flooded pack track and mitigate for the loss of historic sites.
- Clearance of vegetation immediately around the proposed reservoir shoreline, and at selected areas within the inundation zone for navigation and amenity reasons,
- Access facilities for recreational boating.

80. No mitigation (or environmental compensation) is proposed in respect of adverse effects on the natural character and outstanding landscape values associated with the Mokihinui gorge, the destruction of significant habitat in the gorge, and the loss of white-water opportunities and other recreational amenity associated with the gorge and historic pack track.

81. The proposed conditions include a number of management plans to guide construction and rehabilitation projects and mitigation and compensation activities. These include an Aquatic Ecology Management Plan, a Terrestrial Ecology Management Plan and the BES discussed above. These plans adopt an adaptive management approach to the management of effects on fish habitat and river ecology, effects of dam and transmission line construction activities, and the establishment of the proposed BEA.

82. Based on the evidence of Dr Kelly, Dr Allibone, Dr Death, and Dr Hudson the MHP will give rise to significant adverse effects on river connectivity, ecology and habitat values both above and below the dam which are unable to be avoided, remedied or mitigated. There are also considerable uncertainties around the proposed mitigation conditions including the adaptive management approaches that are intended to address some of these impacts. In particular, the ability of trap and transfer systems to substitute adequately for the existing ecological connectivity in the river and the upstream and downstream migration of native fish and eels appears questionable, and in my opinion this is a key issue associated with the MHP. Dr O'Donnell, Dr Leathwick and Mr Tim Shaw also raise questions about the effectiveness of the BES, both in terms of implementation, and the degree of additionality it would provide. In my opinion, this degree is of uncertainty about the effectiveness of the consent conditions in relation to aquatic ecology and environmental compensation is inappropriate, particularly where a project has such major and irreversible effects as the MHP.

83. As described in the evidence of Mr Ian Whitwick, the pack track through the gorge is currently being upgraded to a walking and mountain bike track standard as part of the Old Ghost Road project, and a new hut associated with this project is under construction at Specimen Creek. The relocated track proposed by Meridian would not therefore constitute any improvement over the standard of the upgraded pack track, would lack the amenity and heritage values associated with the existing track that are referred to in the evidence of Mr Whitwick and Ms Watson, and is unlikely to provide any additional benefits in terms increased recreational access. Construction of the realigned track is also likely to give rise to adverse impacts on the natural character of the gorge. In my opinion, it would only provide compensation for the existing pack track and cannot be considered as constituting mitigation or as providing any additional positive effects. .

Conclusions

84. Overall I consider that the adverse effects associated with the MHP are more than minor, and that the project will give rise to a number of actual or potential significant adverse effects that cannot be avoided, remedied or mitigated. In my view, the positive effects associated with the proposal, including those associated with the generation of renewable electricity and the proposed environmental compensation, have been overstated and do not outweigh these adverse effects.

RELEVANT PLAN PROVISIONS

85. In this section I review the MHP against key provisions of the BDP and the regional plans in terms of section 104D and 104(1) of the RMA. The full text of the relevant objectives and policies from the BDP is at Appendix One and for the regional plans and RPS these are at Appendix Two.

86. The regional plan provisions that I consider are most applicable are those in the Proposed Regional Land and Riverbed Management Plan (PRLRMP), Proposed Regional Water Plan (PRWP), and the Regional Coastal Plan (RCP). While the Regional Plan for Discharges to Land (RPDL), and the Regional Air Quality Plan (RAQP) are also of relevance to the MHP, the activities that they apply to are minor and in my opinion nothing turns on them, so I do not discuss them further.

87. On 17 September 2010 the West Coast Regional Council (WCRC) notified a proposed Regional Land and Water Plan (PRLWP) which merged the provisions of the PRLRMP, the PRWP, and the RPDL. The principle intent for preparing the PRLWP was to reformat the three plans into one for greater efficiency and ease of use, as well as to "fine tune" and make "minor improvements" to the plans[10]. There are some minor additions, and the deletion of much of the explanatory material, but the PRLWP does not include any amendments to the objectives and policies from the merged plans that the MHP was considered under at the Council hearings. At this stage the WCRC has not withdrawn the operative PRLRMP, PRWP, and RPDL.

88. Perhaps unexpectedly for the WCRC, notification of the "reformatted" plan attracted a large number of submissions seeking significant amendments to the wording of the

[10] WCRC, 2010: Proposed Regional Land and Water Plan - Information Sheet

objectives and policies in the PRLWP, as well as further submissions in opposition to these. This is evident from the changes sought in the Meridian Energy submission attached to the evidence of Mr Kyle, many of which have been opposed by the Director General of Conservation in further submissions. In remains to be seen how the WCRC will address these issues, as the amendments sought go well beyond the original intent of council in notifying a merged plan. At the time of writing no hearings on these submissions had been held, or decisions received.

89. On 18 January the WCRC amended the PRLWP to include two new transitional policies in accordance with section 55 (2) of the RMA and policies A4 and B7 of the National Policy Statement for Freshwater Management 2011 (NPSFM). These policies came into force on 1 July 2011, but do not apply to the MHP as consents for this project were lodged prior to the NPSFM coming into force on 1 July 2011, and are specifically excluded under the NPSFM.

90. The wording of the policies and objectives in the PRLWP are the same as those in the PRLRMP, and PRWP. I therefore agree with Mr Kyle that the easiest way of tracking the objectives and policies under these plans is to use the numbering system in the PRLWP. There is one exception to this approach. Chapter 5A of the PRLRMP has been amended as a result of interim decisions from the Environment Court, and these changes are not reflected in Chapter 5 of the RWP. In my discussion of the regional plans, I will therefore refer to Chapter 5A of the RLMP as amended by the Court and not to Chapter 5 of the RWP.

91. If changes occur to the PRLWP as a result of the WCRC hearings there will be a need to cross refer to the both the operative and proposed plans. For this reason I have included the WCRC Merged Plan Conversion Table at my Appendix Three.

92. This review of the relevant plan provisions is followed by a brief discussion of the permitted baseline.

Buller District Plan

93. I have assessed the MHP against what I consider are the key BDP objectives and policies below. I have also provided a table with the relevant objectives and policies and an analysis of the application against the plan provisions that that the Commissioners considered , at Appendix One.

94. Section 4.2 of the BDP addresses Infrastructure. Objective 4.2.5.1 provides for the efficient development of infrastructure, while avoiding, remedying or mitigating adverse effects. Policy 4.2.6.1 permits development in areas that are difficult to service where appropriate technical solutions are provided that address adverse effects. Policy 4.2.6.2 requires services to be provided in a manner that does not have adverse effects and enables communities to provide for their health and safety

95. Based on the evidence of Meridian Energy, the respondents and the Director General of Conservation it will not be possible to avoid, remedy or mitigate adverse effects arising from the construction and operation of the MHP, in terms of Objective 4.2.5.1 and Policy 4.2.6.2. Ecological connectivity and sediment transport along the river would be cut by the dam, and the MHP would have adverse effects on aquatic ecology both above and below the dam, and on indigenous biodiversity, natural character, landscape, heritage and recreational values of the Mokihinui river and gorge, and on areas within the transmission corridor. In relation to Policy 4.2.6.1, while the MHP would provide for the generation and transmission of electricity the technical solutions (as expressed through the proposed mitigation and compensation conditions) would not be able to avoid, remedy or mitigate adverse effects on the environment. In my opinion, overall the MHP is inconsistent with the most relevant Infrastructure objectives and policies.

96. Section 4.4 of the Plan addresses rural land and water resources. Objective 4.4.4.1 requires that, in enabling rural communities to provide for their social, economic and cultural wellbeing, the overall integrity and character of the rural environment and productivity of land resources is to be protected. Policies under this objective permit or promote activities that do not affect the sustainability of rural land, and maintain and enhance the amenities and character of the rural area.

97. It is not entirely clear what is meant by the reference to the "overall integrity and character of the rural environment" in Objective 4.4.4.1. The accompanying text identifies subdivision, soil conservation , and rural sustainability as potential issues that are intended to be addressed. However the Explanation under 4.4.7 also includes the following statement in relation to sustainability and effects on the environment:
Controlling the environmental effects of activities, including aspects of location and scale, is an effective means of ensuring that this aim is achieved.

This implies that the Objective and Policies are intended to manage a wide range of effects, including the location and scale of activities generally. Given that location and scale are of some significance in relation to the environmental effects of the MHP, I consider that the application should be assessed against this objective.

98. The evidence of Mr Williams, Mr Lister, Stephen Brown, Kelvin Lloyd and David Norton finds that the Mokihinui catchment, the river and gorge within it and parts of the transmission corridor have very high natural character and constitute an outstanding landscape and natural feature or contains significant areas of indigenous vegetation. The variety of landforms, distinctive qualities and high natural values of these areas clearly contribute to the overall integrity and character of the rural environment of which they form part. I note that Objective 4.8.6 (which I discuss below) requires that the importance of significant indigenous vegetation and habitat to the character and quality of the environment and the well-being of people and communities is recognised

99. In my opinion the MHP would be inconsistent with this objective as the integrity and character of the rural environment will not be able protected due to the extent of modifications to the highly natural Mokihinui river system, gorge and land associated with the footprint of the scheme. I do not consider that these impacts would be offset by the proposed compensation and mitigation. I also question whether the MHP is necessary to provide for social, economic and cultural wellbeing as a reliable supply of electricity is being supplied to the District (albeit at slightly higher prices) from other sources. While the scheme may provide a period of (largely) short term employment and for some new recreational activities, it may also have impacts on cultural wellbeing through the loss of indigenous vegetation and habitat and impacts on existing uses of the river (such as white baiting and existing recreational activities associated with the gorge). While there will be a loss of biological productivity from the flooding of the gorge, the reference to maintaining productivity in this Objective is more relevant to soil conservation on agricultural soils, and in my view is not particularly relevant to the MHP

100. I consider that the MHP would be inconsistent with most of the relevant policies under Objective 4.4.4.1, because it would give rise to cumulative adverse effects on the rural land resource within the footprint of the project, and that these would detract from rather than maintain or enhance the amenities and rural character of the area.

101. Objective 4.4.13.1 promotes land use activities that do not adversely affect water quantity, in order to safeguard life supporting capacity. The policies under this Objective provide for matters including:

- The protection, wherever possible, of significant water related ecological, cultural and heritage sites through integrated land management practice;
- The protection of water resources from land based activities;
- The management of land use activities to protect the life supporting capacity of water resources and to take account of in-stream values and water users; and
- The protection of riparian margins to maintain the natural character of waterways, natural habitats, and natural and aesthetic and amenity values associated with them.
- control of the modification of significant natural wetlands to protect natural character, landscape values, habitat values, and to sustain their life supporting capacity.

102. On the evidence of Dr Lloyd, Dr Death, and Dr Kelly, the MHP would not safeguard the life supporting capacity of the Mokihinui river and part of the gorge. The dam would block sediment transfer, and connectivity for aquatic invertebrates and migratory fish, and result in modified flows in the lower river which would reduce its productivity and diminish its habitat value for native fish and trout. The formation of the reservoir would destroy the existing habitat in the gorge for blue duck and grey duck and the seep and tributary habitat that has high biodiversity value for invertebrates and bryophytes, and which could not be compensated for[11]. It would also result in the loss of the unusual riparian vegetation communities that have formed as a result of flood flows. The reservoir would result in extensive modifications to the integrity, natural character and amenity of the river system, the gorge and surrounding land, and result in significant adverse effects on the sustainability of these resources. Ecological, cultural and heritage sites associated with the project area would not be protected, there would be significant adverse effects on the natural character, habitat, aesthetic values of the river, and on in stream values and values for existing users., and the significant natural wetlands associated with the turf communities, and seep and tributary habitat would not be protected.

[11] Evidence of Ned Norton

103. Overall, it is my opinion that the MHP is contrary to the objectives and policies for water resources.

104. Section 4.6 of the plan addresses cultural and historic resources. Under Objective 4.6.7 places and sites of historical or cultural value are to be protected from adverse effects and, where appropriate, access to them maintained. Under the policies, heritage resources of special significance are to be identified, and resource consent applications are to be assessed for potential impacts. The pack track up the Mokihinui gorge is specifically identified in Part 14 of the Plan (Schedule of Historic Buildings and Sites).

105. I consider that the application is largely consistent with the policy requirement to identify historic resources and assess the impacts on them. However, much of the historic pack track up the Mokihinui gorge and relics of early mining activities will be destroyed if the MHP proceeds. On the basis of the evidence of Katharine Watson and Ian Wightwick the pack track has important historical, cultural and amenity value and should be protected. The application would therefore be contrary to Objective 4.6.7.

106. Section 4.7 addresses the coastal environment. Objective 4.7.5 requires the natural character of the coast to be maintained and enhanced by avoiding, remedying or mitigating the effects of activities requiring a coastal location. The MHP will have impacts on the coastal environment because of the reduction in sediment supply to the coast which has flow on effects for coastal processes, rates of coastal retreat, and possibly on the form and functioning of the coastal lagoon. While the scheme itself does not require a coastal location, certain associated mitigation works do. These include the proposed protection works at Mokihinui village (for which consent has already been granted), and possible remedial works adjacent to the coastal lagoon and along the coast north of the river mouth.

107. Policies 4.6.7.2 and 4.6.7.3 require sensitive coastal environments to be protected from the adverse effects of land use activities, and that the protection of whitebait spawning habitats to be encouraged, respectively.

108. On the basis of the evidence of Murray Hicks, the MHP will give rise to a reduction in sediment supplies to the coast and hasten processes of coastal retreat, the river-delta shoreline will retreat landward, the size of the offshore delta-bar will likely reduce, and coastal processes associated with the river mouth and estuary may be affected. In my opinion, this part of the coastline could be considered sensitive because rates of coastal

retreat and coastal processes maintaining the river delta and coastal lagoon are partly reliant on the supply of sediment form the Mokihinui. This supply of sediment will cease with the construction of the dam. On the evidence of Dr Hudson, Dr Allibone, and Dr Kelly there will be adverse effects on whitebait spawning areas in the lower river.

109. In my view, the MHP would be inconsistent with, or contrary to the relevant objectives and policies for the coastal environment section of the BDP.

110. Section 4.8 of the BDP includes objectives and policies for the management of ecosystems and natural habitats. Objective 4.8.6 is concerned with the protection of significant indigenous vegetation and significant habitats of indigenous fauna. It also states that their importance to the character and quality of the environment and the well-being of people and communities is to be recognised. In my view, there is a link between this part of the objective and Objective 4.4.4.1 which requires in part that the integrity and character of the rural environment be protected.

111. Under the Policy 4.8.7.1, adverse effects from development proposals on all natural habitats and ecosystems are to be taken into account. Policy 4.8.7.2 encourages the protection and enhancement of whitebait spawning areas and significant indigenous vegetation and habitat. Policy 4.8.7.3 requires that modification of significant wetlands be controlled in order to protect their natural character, landscape, significance as habitats and to sustain their life supporting capacity. Policy 4.8.7.4 sets out criteria to be used as guidelines to identify significant indigenous vegetation and habitat. These criteria extend beyond terrestrial habitat – for example criteria 6 – Connectivity, and criteria 8 – Migratory habitat, both of which are relevant to aquatic ecosystems. Interim Policy 4.8.7.6. requires that decisions on resource applications recognise and provide for the protection of significant indigenous vegetation and indigenous habitat and natural values associated with riparian margins.

112. Based on the technical evidence, the MHP would result in the destruction of the riparian turf community, habitat for blue duck and grey duck, seeps and tributaries with unusual invertebrate and bryophyte communities and approximately 300ha of indigenous vegetation and habitat for indigenous fauna. This aquatic and terrestrial habitat and vegetation within the gorge has been identified as significant in terms of the criteria in Policy 4.8.7.4 by Dr Kelvin Lloyd, Mr David Norton, Dr Colin O'Donnell, Dr Russell Death, and Ms Kath Walker. The Mokihinui river has been assessed as significant habitat

for indigenous fish and eels, and for blue duck in the evidence of Dr Dave Kelly, Mr Tim Shaw, and Mr Willie Shaw. On the basis of the evidence of Dr Kelly and Dr Allibone and Dr Leathwick it would also meet the criteria under 4.8.7.4 as being significant for connectivity and migratory habitat for native fish. Indigenous vegetation in the gorge has also been assessed as contributing to the landscape, natural character and amenity values of the area. In my opinion it therefore contributes to the character and quality of the natural and physical environment of this part of the District in terms of Objective 4.8.6, and should be protected in terms of that Objective and Policies 4.8.7.2, 4.8.7.3, and 4.8.7.6.

113. Meridian has offered two offset projects as compensation for the loss of the flooded indigenous vegetation and blue duck habitat: the BES and the protection of Waimangaroa Bush. Dr David Norton considers that

> *Without the BES, indigenous biodiversity will continue to decline within the Mokihinui River catchment, including both the impact and biodiversity enhancement areas, and will eventually result in the extinction of a number of key species from this area* (paragraph 3.6).

114. Mr Kyle (paragraph 7.117)) asserts that, with the BES, there will be a net overall gain for biodiversity at the catchment level. He considers that these measures are sufficiently robust to ensure consistency with the objectives and policies under 4.8 Ecosystems and Habitats in the BDP. While Mr Crystal considers that the destruction of significant indigenous vegetation and habitat in the gorge is contrary to the policies under Objective 4.8.6.1 (paragraph 59), he is of the view that the offset package will reduce the extent to which it is contrary to those objectives and policies.

115. However, Dr O'Donnell challenges Dr Norton's assertion that, without the BES, indigenous biodiversity will continue to decline (para 192). He notes that the proposed biodiversity offsetting approach advanced by Dr Ussher would not address a number of components of significant habitat in the gorge, which he identifies at his paragraph (175), and may not protect forest similar habitat types. He also questioned the reliance on a single control method in the BES (188). Dr Lloyd considers that the proposed offsetting approach would result in major net losses of highly significant ecological values (paragraph 210). It excludes important elements of biodiversity in the impact sites and by doing so strongly under-estimates the true loss of biodiversity in the impact sites (paragraph 213). Mr Tim Shaw considers that, while an effectively delivered BES would

provide considerable biodiversity compensation, the potential improvements for whio and therefore biodiversity from the BES are not as 'overwhelming' as suggested (paragraph 15).

116. Dr Leathwick notes that there are no offsetting provisions for aquatic ecosystems, and that there are major flaws in the proposals to offset terrestrial habitats through the BES. He states that recent systematic ecological evaluation work by the Department of Conservation has resulted in the Mokihinui gorge and catchment being identified as priorities for management. This may result in additional ecological enhancement work, to that being carried out in the catchment at present. In my opinion this would have significant implications for the degree of "additionality" associated with the BES, and therefore the extent to which it would provide compensation for the loss of biodiversity values associated with the inundation area.

117. On the basis of the evidence, the application would give rise to significant adverse effects on indigenous vegetation and habitat associated with the Mokihinui river and gorge, and while the BES would potentially compensate for the loss of some indigenous vegetation and habitat , impacts on aquatic ecology, the riparian vegetation, seep and tributary habitat, grey duck habitat and significant forest communities in the gorge, would not be able to be avoided, remedied or mitigated. In my opinion the application is contrary to the objective and almost all the relevant policies under the Ecosystems and Natural Habitats section of the BDP because it would not result in the protection of the significant indigenous vegetation and habitat or the natural riparian margins of the area.

118. Section 4.9 of the plan addresses landscapes and natural features. Under Objective 4.9 the distinctive character and unique features of outstanding natural landscapes and features are to be protected. Under the policies, activities that significantly alter the character of outstanding landscapes are to be discouraged, and character areas that reflect distinctive landscape elements and natural values are to be identified in the Plan.

119. In their evidence, Mr Brown, Mr Rough and Mr Lister, find that the Mokihinui gorge has very high natural character and forms part of an outstanding natural landscape. Mr Lister considers that the gorge is an outstanding natural feature that is part of a wider outstanding landscape that encompasses the catchment of the Mokihinui. On his evidence, and that of Mr Williams, the proposed dam and inundation of the gorge will have significant adverse effects on the geomorphology, natural character and landscape of the gorge, and people's experience of the landscape, and these effects cannot be avoided, remedied or mitigated.

120. On the basis of Mr Lister's evidence, and that of Dr Lloyd, Dr Kelly, Dr Leathwick, Mr Wightwick and Mr Williams, and my own observations, the character of the gorge will be significantly altered if the project proceeds. As the distinctive character and unique features of the outstanding natural landscape of the gorge will not be able to be protected, the application is contrary to both the objective and policy for landscapes and natural features in the plan.

121. Objective 4.10.6.1 under the Natural Hazards section of the BDP requires that risks to people and communities from these hazards to be reduced and activities be avoided that increase their likelihood of occurring. Because the MHP will block the transfer of sediment to the coast it will accelerate rates of coastal erosion, which has been identified as a natural hazard along this part of the coast. While the proposed coastal protection works would reduce the risk to the Mokihinui community in the short to medium terms, it will increase the natural hazard risk in the general area, and the objective requires such activities to be avoided.

122. In my opinion, the MHP would be contrary to this Objective. However, it would be consistent with the policies under this objective which are primarily about the identification of natural hazards, increasing public awareness of them, and the process to be used to assess proposed mitigation measures.

Proposed Regional Land and Water Plan

Chapter 4 Lake and Riverbed management

123. Objective 4.2.1 under this plan provides for the adverse effects of river bed activities to be avoided, remedied or mitigated on a range of matters including natural character, indigenous biodiversity and ecological values (including fish passage), sports fish habitat, and amenity and cultural values. Policy 4.3.1 provides for appropriate use and development in rivers. Policy 4.3.2 requires that activities in the bed of any river (including the erection of structures) be managed so that they do not cause or contribute to significant adverse effects on matters including heritage, amenity or cultural values, aquatic ecosystems (including fish passage) natural character and significant indigenous vegetation and habitat.

124. While Policy 4.3.1 provides for appropriate use and development, in my view this will partly be determined by assessing the effects of a proposal against the matters identified in

the Objective and Policy 4.3.2. Based on the evidence of Dr Leathwick, Dr Kelly, Dr Allibone, Dr Death, Dr Schallenberg, Dr Lloyd, Mr Lister and Mr Wightwick there will significant adverse effects on the matters (c) to (h) under Objective 4.2.1 and the matters under Policy 4.3.2 except (b) and (f). It would not be possible to manage the proposed activities so that these effects would be able to be avoided, remedied or mitigated.

125. Because of the significance of the adverse effects identified by these witnesses, and the potential for renewable electricity generation to be provided in other locations, the application is unlikely to be an appropriate development in terms of policy 4.3.1. In my opinion the MHP would be contrary to the Objective and relevant policies under the Lake and Riverbed chapter of the PRLWP, and Chapter 5 of the PRLRMP.

Chapter 5 Wetland Management (Chapter 5A PRLRMP)

126. Chapter 5 of the PRLWP is based on new Chapter 5A of the PRLRMP, which was introduced under Variation 1 to the PRLRMP. Variation 1 was subsequently appealed to the Environment Court which has issued several interim decisions to Chapter 5A[12]. However, it is not entirely clear how these decisions will affect Chapter 5 of the PRLWP as this is contained in what is effectively an entirely separate proposed plan.

127. I have assumed that the decisions of the Court will be carried through to Chapter 5 of the PRLWP, either by way of a council decision or variation. In any event, the PRLRMP still has effect, and decisions on Chapter 5A have been made by the Court. As this decision[13] is the most recent and authoritative to date, I therefore only address Chapter 5A of the PRLRMP, as amended by the Court, and set out in the attachment to their decision[14].

128. The Objective under Chapter 5A of the PRLRMP requires that the protection of the natural character, indigenous biodiversity, and other values of wetlands in the region be recognised and provided for (5A.2.1). The PRLRMP does not define "wetland", and the definition in the RPS is the same as that under the RMA: *permanently or intermittently wet areas, shallow water and land water margins that support a natural ecosystem of plants and animals adapted to wet conditions*. Communities and habitats within the Mokihinui gorge which may meet this definition include the turf communities that are subject to periodic flooding and scouring, the land water margin of the river and tributaries, and seeps and

[12] Friends of Shearer Swamp and others v West Coast Regional Council. First interim decision:CIV-2010- 409-002466, Second interim decision: 2012 NZEnvC 006.

[14] [2012] EnvC 006

tributary streams and their margins. These habitats have been shown in the evidence of …to have high natural character and biodiversity values. In particular, Dr Lloyd considers the turf communities to be potentially national significance, while the Meridian witnesses … and Dr Death have identified the high biodiversity values associated with the tributary streams and seeps for bryophytes and invertebrates. Flooding of the gorge would result in the destruction of these wetland features.

129. Policy 5A.3.4 is:

To provide protection for any wetlands…that are shown to meet any one of the ecological criteria in Appendix 8, and to identify and protect the values of these wetlands and their margins to ensure their natural character and ecosystems (including ecosystem functions and habitats) are sustained.

130. On the evidence of Dr Lloyd the lower part of the riparian turf zone constitutes wetland vegetation under the RMA (and RPS) definition (paragraph 5.4.4). Dr Lloyd does not assess this vegetation in terms of the criteria in Appendix 8, but considers that the seep areas in the Mokihinui gorge would meet a number of these criteria (paragraph 6.6).. The flooding of the gorge would destroy these wetland areas, and would be directly contrary both to the intent of this policy, and to that of Objective 5A.2.1.

131. I note also that the interim decision has required that the Issue in both Chapters 4 and 5 of the PRLRMP be amended to state that, where provisions in the plan dealing with wetlands are at variance with those in Chapter 5A, the provisions in Chapter 5A take precedence. This has implications, for example, for Policy 5.4.1 of the PRLRMP (Policy 4.3.1 of the PRLWP) which provides for appropriate use and development of river beds. I understand the effect of the Courts decision would be that the protection of significant wetlands under Policy 5A.3.4 would take precedence over this particular policy.

Chapter 6 Natural and human use values

132. The relevant objectives under this chapter:

- Provide for the sustainable use and development of water resources (6.2.1),
- Protect water bodies from inappropriate use and development by maintaining their natural and amenity values, including natural character and aquatic ecosystems(6.2.2),
- Provide for the maintenance or enhancement of values and uses of significance to Poutini Ngäi Tahu (6.2.3), and
- Avoid the exacerbation or creation of natural hazards (6.2.4).

133. Under Policy 6.3.1 priority is to be given to avoiding adverse effects of water related activities, including effects on the habitat of threatened species identified in Schedule 5A to the plan, the natural character of rivers and their margins, significant indigenous vegetation and habitat, values and uses of significance to Poutini Ngäi Tahu, and on existing lawful uses. The Mokihinui River is listed in Schedule 5A to the Plan as habitat for Giant kokopu , blue duck, and long fin eel.

134. Policy 6.3.2 requires that benefits from the use and development of renewable energy be taken into account, including social and economic benefits.

135. Policy 6.3.3 requires that, in the management of any activity involving water, adverse effects are be avoided, remedied or mitigated on matters including water quality, indigenous biological diversity, and natural character not described in 6.3.1. Policy 6.3.5 identifies particular features of the natural character of water bodies to be recognised and provided for, including topography, natural flow characteristics, water level and fluctuation, and ecology. The extent of use and development within the catchment, and the extent to which this has affected the above features are also to be taken into account.

136. Policy 6.3.7 requires, that when considering adverse effects on water bodies, particular regard is had to aesthetic values, recreational opportunities and sports fish habitats, as well as the extent to which existing use and development in the catchment has influenced these.

137. Based on the evidence of Dr Leathwick, Dr Kelly, Dr Allibone, Dr Death, Dr Schallenberg, Dr Lloyd, Dr Williams, Mr Lister and Mr Wightwick, and my own knowledge of the river and gorge, I consider that the application would be inconsistent with or contrary to several of the these objectives and almost all the relevant policies. While provision is made for the sustainable use and development of water under Objective 6.2.1, the MHP would conflict with Objective 6.2.2 in that it would not maintain the natural character and life supporting capacity of the aquatic ecosystems of the river. In relation as to whether the MHP would maintain the spiritual and cultural values and uses of Poutini Ngai Tahu, I note that the MHP would give rise to effects that would conflict with a number of the desired outcomes listed in the table under section 2.14 of the Plan, which is entitled Identifying Poutini Ngäi Tahu's Issues of Significance. On the basis of these desired outcomes, the MHP would appear to be contrary to or inconsistent with this objective.

138. Adverse effects on habitats of threatened native fish species, the outstanding natural feature of the gorge and the wider landscape, significant indigenous vegetation and historic heritage, would not be able to be avoided in terms of Policy 6.3.1. Existing lawful uses and access such as kayaking, rafting and fishing in the gorge, as well as use of the historic pack track would not be maintained. The features, qualities and characteristics of the Mokihinui river and gorge that are identified under policies 6.3.3 and 6.3.6, and which reflect the unmodified and highly natural state of the catchment, would be lost or significantly impacted upon.

139. The benefits from the use and development of renewable energy, in terms of Policy 6.3.2 must also be taken into account, and I acknowledge that the application is not inconsistent with this policy. However, as I have commented above, and on the evidence of Mr Heaps, these benefits are able to be derived from renewable electricity generation and conservation measures in other locations. Such an approach could avoid the significant environmental effects associated with the MHP, and that the previous policies seek to avoid. Any residual benefits would be, in my view, relatively low.

140. The explanation to this policy states (in part):
Where renewable energy developments provide significant community benefits (locally and nationally) it may be sufficient to remedy or mitigate unavoidable effects.

141. In my view, this simply states the obvious: in some circumstances it may be appropriate to remedy or mitigate effects that cannot be avoided. However, where such an approach is considered the proposal must be assessed against the other objectives and policies of the plan, including those outlined above. In any event, even if weight was to be put on the explanation, the MHP will clearly not sustain the life supporting capacity of the Mokihinui river and will have unavoidable effects that cannot be remedied or mitigated. These include the significant adverse effects on life supporting capacity, natural character, landscape, aquatic habitat, threatened indigenous plant and animal species, and existing amenity and recreational use of the river and gorge.

142. Overall, I consider that the application is contrary to the relevant objectives and policies of Chapter 6 of the PRLWP (and Chapter 5 of the PRWP), other than in respect of Policy 6.3.2.

Chapter 7 Surface water quantity

143. The relevant objectives for surface water quantity:

- Promote the retention of flows in water bodies that maintain in stream values, natural character and life supporting capacity (7.2.1);
- Provide for water needs of industries and network utility operators (7.2.2);
- Seek to avoid and remedy or mitigate adverse effects from managed flows (7.2.5).

144. Policy 7.3.2 requires that, where takes from rivers are greater than 20% of the rivers mean annual low flow (MALF), a minimum flow based on 75% of MALF will be applied. The mean annual 7-day low flow at the Mokihinui gorge is 16 cumecs. As the minimum discharge flow from the MHP is proposed to be 16 cumecs, this policy will be able to be met.

145. Policy 7.3.9 applies in respect of controlled lakes such as the proposed Mokihinui reservoir. Where appropriate, adverse effects are to be avoided, remedied or mitigated on the matters in Policies 6.3.1, 6.3.2, and 6.3.3 (discussed above), riparian values and access, and the needs of West Coast people and communities

146. Policy 7.3.10 provides that, in managing controlled flows, regard should be had to the matters in Policies 6.3.1, 6.3.2, and 6.3.3; to the periodic release of water, where necessary, to remove excess algal growth or sediment; and the extent to which the water body has been modified. Policy 6.5.4 imposes a requirement, where necessary, desirable and practicable, to make provision for fish migration.

147. To a degree, the MHP would assist in providing for the needs of industry and network operators and the West Coast community in terms of Objective 7.2.2 and Policy 7.3.9 (e). It is also consistent with Policy 7.3.3, 7.3.5 and 7.3.7 in respect of setting and monitoring minimum flows. However, as the river's in-stream, natural character and life supporting values would not be maintained, and adverse effects arising from managed flows in the river would not be avoided remedied or mitigated, in my opinion it would be contrary to Objectives 7.2.1 and 7.2.5. As discussed above, it would also be contrary to most of the matters identified under Policies 6.3.1, 6.3.2, and 6.3.3 as identified under (a) in Policies 7.3.9 & 10.

148. On the evidence of Dr Kelly, Dr Leathwick and Dr Allibone, the proposed dam would significantly impact on ecological connectivity within the river, native fish passage would be blocked,, and the proposed trap and transfer system would not provide adequate mitigation. Provision for fish migration is both necessary and desirable to maintain the life supporting capacity and aquatic ecosystem values of the river, but may not be practical in terms of Policy 7.3.11 if the dam proceeds. Because of this qualification, I consider that the MHP is inconsistent rather than contrary to this policy. As the Mokihinui is highly natural and essentially unmodified in terms of Policy 7.3.9 (b) (riparian values) and Policy 7.3.10 (d), I also consider that the application would be inconsistent with these policies.

149. Overall, I consider that the application is contrary to, or inconsistent with key objectives and policies that protect or manage adverse effects on natural resources in Chapter 7 Surface Water Quantity of the PRLWP (Chapter 6 of the PRWP). It is consistent with the key objective and several policies or part policies in those chapters that provide for the allocation and use of water resources

Chapter 8 Surface water quality

150. The objective under this chapter is to maintain or enhance the quality of the West Coast's water (8.2.1). Policies 8.3.5 and 8.3.6 are the most relevant to the application. They set out respectively the matters to be had regard to in considering applications for new consents, and criteria for establishing the size of mixing zones. The criteria in Policy 8.3.6 include a cross reference to the matters in Policy 6.3.1.

151. Mr James has identified that that the hypolimnion of the proposed reservoir will become anoxic after the filling of the reservoir. Dr Schallenberg confirms this and considers that this could persist beyond the 10 years identified by the applicant. He had also identified the potential for an anoxic discharge from the MHP reservoir under certain circumstances, and this has the potential to adversely affect fish and invertebrates in the lower river.

152. The development of an anoxic hypolimnion, and any discharge of that anoxic water to the lower river, would not maintain or enhance the quality of the water in the Mokihinui in terms of Objective 8.2.1. It also has implications in for Policy 8.3.5 (a) & (d) in terms of the sensitivity of the receiving environment to adverse effects, and the assimilative capacity of the lower river. In my opinion, the application would be contrary to Objective 8.2.1 and may be inconsistent with Policy 8.3.6 in Chapter 8 of the PRLWP (Chapter 7 of the PRWP).

Relevant plan provisions: conclusions

153. The application conflicts with a number of the objectives and policies of the BDP, and PRLWP. While there are several objectives and policies in these planning documents that could be interpreted to lend support to hydro development generally, these are either heavily qualified or are accompanied by objectives and policies that set limits on the level of effects permitted on the environment. Generally, the MHP would exceed these limits. Given the scale of the adverse effects associated with the MHP, it is my opinion that overall, the application is contrary to the objectives and policies of the relevant plans, other than in respect of the Regional Air Quality Plan (RAQP).

PERMITTED BASELINE

154. Under section 104 (2) the consent authority may disregard an adverse effect of the activity on the environment if the plan permits an activity with that effect.

155. In *Queenstown Lakes District v Hawthorn Estate Limited* (CA45-05) the Court of Appeal stated:

> *The "permitted baseline" is simply an analytical tool that excludes from consideration certain effects of developments on the site that is subject to a resource consent application. It is not to be applied for the purpose of ascertaining the future state of the environment beyond the site.*

156. The permitted baseline therefore only applies at the level of the site, not the wider receiving environment. In this case, I would understand the site to be the footprint of the activities associated with the MHP. Therefore, activities that are permitted or have been consented under the relevant plans but fall outside the site of the MHP activities are not to be considered under the permitted baseline.

157. The activities and effects that would form the permitted baseline were identified at pages 19-22 of the Joint s42a Planning Officers' Report to the West Coast Regional Council and Buller District Council. The activities and associated level of effects permitted under the relevant plans was generally minor when compared with the actual and potential effects of the MHP. On the basis of that report, and my own knowledge of the plans the permitted baseline is only relevant to activities such as minor earthworks, vegetation clearance, and river bed disturbance and would be largely restricted to activities associated with the

access roading and tracks, the proposed tramping track, and some land disturbance activities associated with the transmission corridor. It should also be noted that some activities that are permitted under the BDP require a consent for associated activities under the relevant regional plan (e.g. land disturbance under the PRLWP), and vice versa.

158. I agree with Mr Crystal at his paragraph 28 that the permitted baseline is "unlikely to play any important role in this case" because of the scale of the activities associated with the application, and the relatively low thresholds for permitted activities in the relevant plans.

SECTION 104D CONSIDERATION

159. As discussed above, consents for non-complying activities can only be granted if they pass one of the two threshold tests imposed under section 104D (1) (a) or (b).

160. There appears to be general agreement among the various planning witnesses that if resource consents are granted for the proposed MHP, that this will give rise to adverse effects that are more than minor. However, there is disagreement among the various expert witnesses as to the significance of these effects, and the extent to which the proposed compensation should be taken into account as part of the section 104D assessment.

161. Taking into account the evidence of the witnesses for both Meridian and the Director General of Conservation I consider that there would be adverse effects that are more than minor on:

- the river processes, life supporting capacity and habitat values of the Mokihinui river both above and below the proposed dam;
- the natural character of the river gorge and the section of the river between the gorge and the coast;
- the outstanding natural feature of the Mokihinui gorge and wider outstanding landscape of the catchment;
- significant areas of indigenous vegetation and habitat; and
- historic heritage and amenity values

and these will not be able to be avoided, remedied or mitigated.

162. I have previously discussed the status of the proposed offset conditions offered by Meridian. In my opinion these offsets constitute compensation, and not mitigation, and cannot be taken into account under section 104D (1) (a). However, even if these matters were to be taken into account the MHP would still give rise to effects that are more than minor. It is therefore my opinion that the application would not pass the first threshold test imposed by section104D (1) (a).

163. The second threshold test under section 104D(1) (b) is whether the application is for an activity that will not be contrary to the objectives and policies of the relevant plan or proposed plan. Based on the *NZ Rail* decision of the High Court, the Environment Court defined "contrary" in *Tairua Marine Ltd v Waikato Regional Council* as follows:
In this context, an activity is contrary to an objective or policy if it is opposed in its nature to it, different to it, opposite to it (paragraph 499).
This interpretation was upheld by the High Court on appeal [CIV 2005-485-1490 (paragraph 86)].

164. I have used this definition in undertaking my assessment below.

165. In their decision, the Commissioners for the joint hearing of the District and Regional Council interpreted the "relevant plan" under section 104D(1)(b) as being the BDP on the grounds that the reference to "relevant" *is a direction to limit the enquiry to the plan against which the activity is non-complying* (paragraph 1153). This approach appears to be at odds with that followed by the Environment Court in the *Tairua* case[15] where this assessment was carried out against the objectives and policies of both the transitional regional coastal plan and the Proposed Waikato Regional Coastal Plan (PWRCP). In this case it was only the PWRCP that triggered the non-complying activity. The Environment Court's approach on this matter did not form part of the appeal of their decision to the High Court.

166. There appears to be common agreement that the regional consents should be bundled with the district consents as non-complying activities. I consider that there are equally strong grounds for the various operative regional plans (and the proposed land and water plan that

[15] Paragraph 501

incorporates them) to be considered the relevant plan in relation to the regional consents. My reasons for this are as follows:

167. Firstly, if it is agreed that all the various consents associated with the MHP are bundled as non-complying activities then it would appear from the wording of section 104D (1) that restrictions imposed by the section apply in respect of all these activities, not just the activity which triggered the bundling. My understanding of the concept of bundling is that it results in a common classification (in this case non-complying activity) being applied to individual consents, but does not alter their standing as individual, separate resource consents for different activities. This interpretation is supported by the evidence of Mr Kyle which continues to list all the separate resource consents applied for the MHP. While section 104D refers only to "activity" (and "plan") in the singular, this approach is commonplace throughout the Act (for example, section 104 refers to "a resource consent") and is generally interpreted to apply to both an activity or activities (or consents).

168. Secondly, section 104D (1) (b) refers to the relevant plan/ proposed plan "in respect of the activity". This qualifies the reference to the plan or proposed plan, and indicates that it is the activity which determines the relevance of a plan to the 104D assessment. Clearly, in respect of an activity that triggers, say, a regional riverbed consent it would appear that the relevant plan is the regional plan that triggered the requirement for such a consent.

169. Thirdly, it does not seem logical to assess regional consents against the provisions of a district plan (or vice versa), as the rules that trigger the requirement for these consents flow from the objectives and policies of regional plans. These objectives and policies reflect the purpose of regional plans set out under section 63 RMA which is to *assist a regional council to carry out any of its functions in order to achieve the purpose of this Act*. These functions in turn are set out under section 30 RMA and are different from District Councils functions under section 31. In my opinion therefore, the provisions of a District Plan cannot be considered to adequately address all the relevant matters that need to be taken into account in determining regional consents, and to undertake such an assessment would represent both bad planning practice and be contrary to the overall scheme of the Act.

170. An additional matter arises from the evidence of Ms Montgomery. At paragraph 25 she states: *A key feature of the dam is that the central portion is on the riverbed, for which the*

District Council is not the consent authority. This indicates that in respect of the physical dam structure itself, which she has previously indicated is the principle issue giving rise to non-complying activity status, jurisdiction is spread across, or "blended" between both consent authorities. I am not convinced that Ms Montgomery is correct in her view that the scope of the BDP does not extend to the river bed (in terms of section 9 RMA)[16]. Whether or not this is the case, the dam structure requires both district and regional consents (under section 13 and 14 RMA), and these consents are all deemed to be non-complying. This dual responsibility in respect of the same structure gives additional weight to the position I have outlined above that the regional consents should be assessed against the pertinent regional plan.

171. In the following sections I discuss whether the proposed activities associated with the MHP would contrary to the objectives and policies of the relevant plans.

172. I have assessed the effects of the land use consents under section 9 RMA for construction of the dam, transmission lines, and related activities as part of my consideration under the objectives and policies of the operative BDP above, and in Attachment One. In my opinion, the granting of these land use consents would be contrary to a number of the objectives and policies in that Plan. In particular, they would be contrary to:

- Objective 4.4.13.1 and Policies 4.4.14.3,4 & 7 in that the MHP would adversely affect water quantity and not protect the life supporting capacity of the Mokihinui River or its water resources, natural wetland areas and riparian margins from adverse effects.
- Objective 4.5.4.2 in that the utilisation of mineral resources to build the dam would not result in the life supporting capacity of the water and ecosystems of the Mokihinui being safeguarded.
- Objective 4.6.7.1 in that the MHP would not protect places and sites of historical value.
- Policy 4.7.6.3 in that it would not enhance or protect the spawning habitats of whitebait.

[16] The definition of "land" in the RMA includes *land covered by water and the air space above land*. There appears to be nothing in section 9, section 13 RMA or provisions in the District Plan that precludes the application of the plan rules including the standards under Table 5.7 to a river bed. It is not uncommon for some District Plan rules to apply in respect of river beds (and potentially overlap with regional rules), because of difficulties in determining exactly where dry land ends and river bed begins.

- Objective 4.8.6.1 in that the MHP would not protect significant areas of indigenous vegetation and habitats of indigenous fauna.
- Policies 4.8.7.1, 2 & 4 in that the MHP would not take into account adverse effects on natural habitats and ecosystems, or encourage the protection and enhancement of wetlands, estuarine systems and whitebait spawning areas, or control the modification of significant wetlands.
- Policies 4.8.7.6 & 7in that the MHP would not recognise and provide for the protection of significant indigenous vegetation and indigenous habitat and natural values associated with riparian margins, or protect significant indigenous vegetation and habitat from in appropriate use and development
- Objective 4.9.3.1 in that granting of the consents would not protect the distinctive character and unique values of the outstanding landscape of the Mokihinui gorge and would not be consistent with Policy 4.9.4.1 in that it would encourage rather than discourage activities that would significantly alter the character of the outstanding gorge landscape.
- Objective 4.10.6.1 in that the MHP by increasing coastal erosion, would increase the likelihood of a natural hazard occurring.

173. I do not consider that the offered compensation and mitigation significantly reduce the extent to which the MHP is contrary to the above objectives and policies. This is because, on the evidence of …the additionality that BES would provide over other existing and potential biodiversity enhancement activities within the catchment may be limited, the effectiveness of the proposed predator and browser control appears to be questionable, and neither the BEA nor Waimangaroa Bush provide like-for-like compensation. The compensation and mitigation are not able to address overall impacts on the aquatic ecosystem, or the loss of unusual or otherwise significant habitat and plant communities within the gorge, and effects on the outstanding landscape, natural character and existing amenity values provided by the river and the gorge cannot be avoided remedied or mitigated.

174. The MHP would not be contrary to a number of policies in the BDP. These are identified at Appendix One. I consider many of these policies apply to activities that are peripheral, or form an adjunct to, the MHP. Examples of these activities include the management of

the dam construction site and associated water margins, use of the proposed reservoir for boating activities, utilisation of local rock to build the dam, the identification and evaluation of natural and historic resources, provision of public access along the coast, and identification and management of natural hazards and hazardous substances. Generally, these policies are not relevant to those activities associated with the MHP that involve a significant level of environmental change or major effects, such as the damming of the river, flooding of the gorge, and the construction of the transmission line.

175. In Appendix One I also identify a number of other objectives and policies that the hearing Commissioners took into account in undertaking the section 104D (1) (b) assessment, and which I consider should not have formed part of that assessment. In my opinion, while it is necessary to take a broad overview of plan objectives and policies in undertaking such an assessment, it is not a numbers game, and I do not consider that it is appropriate to take into account objectives and policies that have marginal or no relevance to an application.

176. In forming this view I have also taken into account the decision of High Court in *Rodney District Council v Gould* which had the following to say (paragraph 32):
The Environment Court is not obliged to refer in its decision to every objective or policy of the district plan which might be of marginal relevance to its decision. [2006] NZRMA 217

177. In my opinion, in determining whether an application is contrary to a plan greater weight may also need to be accorded objectives and policies that clearly spell out outcomes or policy intent than those that are vaguely or ambiguously worded.

178. I do not agree with the statement in Mr Crystal's evidence that the 104D (1) (b) assessment "requires an overall review of the purpose of the BDP" (paragraph 38), and consider that there is no statutory or planning basis for this view. I note that in their analysis of section 104D both Mr Crystal and Mr Kyle refer to section 3.5.6 of the BDP to support of their contention that the MHP cannot be considered contrary to the objectives and policies of that plan. Section 3.5.6 (Energy Development) is part of the section 3.5 (Resource Use and Trends) in Part 3 – The Management Environment, a descriptive introductory chapter of the plan. 3.5.6 discusses (in general terms) the hydro potential of a number of rivers within the Buller Districts, including the Mokihinui. It also states that a number of these rivers have been identified for their high wild and scenic values.

179. Section 3.5.6 is not an objective or policy and does not form part of the Significant Resource Management Issues, Objectives and Policies chapter of the Plan. In my view, very little weight can be attached to it in terms of an assessment against the objectives and policies under 104D(1) (b), either individually or in the "round".

180. Based on the technical evidence referred to above, in my opinion the MHP is contrary to the objectives and policies of the BDP, because it would give rise to environmental effects that are "opposed in its nature to, different to, opposite to", the outcomes or intent of a number of key provisions in the plan. Although aspects of the application would be consistent with a number of relevant policies, this is generally in respect of information requirements and more peripheral works and their effects, and does not outweigh parts of the application that would be contrary to the plan objectives and policies.

181. I have considered the applications for regional resource consents for activities under sections 9, 13, 14 and 15 of the RMA against the objectives and policies in Chapters 4, 6, 7, and 8 of the PRLWP and Chapter 5A of the PLRMP above.

182. As discussed above, it is my view that the granting of these consents would be contrary overall to Objectives 4.2.1 and 6.2.2 (and possibly 6.2.3), 7.2.1, 7.2.5 and 8.2.1 of the PRLWP and the relevant policies. In particular:

- There would be significant adverse effects on indigenous biodiversity, aquatic ecosystem values, the natural character of the Mokihinui river and its wetlands, and margins; significant indigenous vegetation and significant habitats of indigenous fauna, and amenity and heritage values and this would be opposite to the clear intent of Objective 4.2.1 and Policy 4.3.2.
- The river's natural character and the life supporting capacity of aquatic ecosystems would not be maintained in terms of Objective 6.2.2.
- In managing the river priority would not be given to the avoidance of adverse effects on the attributes and values identified under Policy 6.3.1(1) and (3), adverse effects on the matters under Policy 6.3.3 would not be avoided remedied or mitigated, and the matters under 6.3.6.would not be recognised and provided for.
- The MHP would not result in river flows and water levels that would maintain in-stream values, natural character, and life supporting capacity as required by

Objective 7.2.1, or avoid, remedy or mitigate the adverse effects of managed flows and fluctuating levels in terms of Objective 7.2.5, or have regard to the matters in Policy 7.3.10 (a) and (d) , or make adequate provision for fish migration in terms of Policy 7.3.11.

- The MHP will not maintain the quality of the water in the Mokihinui River because it will create an anoxic hypolimnion in the reservoir, and may result in the discharge of anoxic water to the lower river

183. The MHP would be contrary to Objective 5A.2.1 which requires that the protection of the natural character, indigenous biodiversity, and other values of wetlands in the region be recognised and provided for. It would also be contrary to Policy 5A.3.4, as the creation of the reservoir would not sustain the natural character and ecosystem functions of the wetlands in the gorge.

184. While Policy 5.4.1 provides for appropriate use and development of river beds and the benefits from the development of renewable energy must also be taken into account under Policy 6.3.2, these policies are subject to the provisions of Chapter 5A which take precedence. In any event, any development for these purposes set out in these policies must either avoid, or avoid remedy or mitigate adverse effects on the environment under the PRLWP, and the MHP would fail to do this.

185. In my opinion, when assessed in the round, granting of the regional resource consents would clearly be contrary to the objectives and policies of the PRLWP (and the corresponding provisions of the PWP and PLRMP) and Chapter 5A of the PLRMP, in respect of the key activities and effects associated with the MHP.

186. Overall, I consider that the granting of consents for the MHP would result in adverse effects that are more than minor and the application would not meet the first threshold test imposed by section 104D under sub-section (a). The application also fails the second threshold test under section 104 D (b), because a number of the activities for which resource consents have been sought would be contrary to the objectives and policies in the BDP and the relevant regional plans.

SECTION 107

187. Under section 107 of the RMA, a consent authority cannot grant a discharge permit for the discharge of a contaminant or water into water if, after reasonable mixing, it is likely to give rise to any significant adverse effects on aquatic life.

188. Based on the evidence of Dr James, Dr Schallenberg, Dr Hudson, Dr Death, Dr Leathwick, and Dr Kelly there is the potential for the discharge from the proposed dam to give rise to significant adverse effects on aquatic life in the river below the dam in two different ways. The first is through the discharge of anoxic water, which would produce a mixing zone of indeterminate length downstream of the dam and within which aquatic organisms would be suddenly exposed to physico-chemical conditions to which they are not adapted. The second effect is through daily changes in the discharge from the dam tailrace which would significantly alter river flows and benthic habitat in the lower river, and create a large variable zone. This has the potential to reduce the productivity and habitat suitability of the lower river and potentially interfere with fish migration up river for some native species.

189. In my opinion, these discharges have the potential to give rise to significant adverse effects on aquatic life in the lower river, and if this were the case the MHP would be inconsistent with section 107 of the Act.

SECTION 104 CONSIDERATION

190. If it is considered that the MHP would pass either of the threshold tests under section 104D, it must then be assessed under section 104 of the RMA. I have assessed the actual and potential effects of the MHP against the relevant plan provisions in previous sections of my evidence. I now consider the application against the provisions of the National Policy Statement for Fresh Water (NPSFW), the National Policy Statement for Renewable Electricity Generation (NPSREG), the New Zealand Coastal Policy Statement (NZCPS), and the West Coast Regional Policy Statement (RPS). I then assess other matters that may be relevant to the application under section 104 (1), including the Proposed National Policy

Statement on Indigenous Biodiversity (PNPSIB), the New Zealand Biodiversity Strategy (NZBS), national energy strategies, and the West Coast Conservation Management Strategy (CMS).

191. Section 104 is subject to Part II of the Act, and I conclude with an assessment of the application against the relevant provisions of sections 5, 6, 7 and 8 RMA.

National Policy Statement for Freshwater Management

192. Only the NPSFM Objectives are relevant to the MHP. This is because the policies are largely process orientated and directed towards the amendment of Regional Plans to achieve the Objectives. Policy B7 (which addressed effects on life supporting capacity) is included in Regional Plans by direction but does not apply to the MHP as consents were lodged prior to the NPSFM coming into force.

193. Objective A1, B1, B4 and C1 are the most relevant to the MHP. A1 and B1 require that the life-supporting capacity, ecosystem processes and indigenous species (including their associated ecosystems of fresh water) are safeguarded, in sustainably managing the development of land and the use or damming of water, respectively. Under Objective B4 the significant values of wetland are to be protected. C1 promotes the integrated management of water and land, including interactions between fresh water, land, associated ecosystems and the coastal environment. I note that there appears to be nothing in the wording of these objectives that restricts their application solely to aquatic ecosystems and species.

194. As discussed in more detail in relation to the PRLWP, the MHP would be inconsistent with these NPSFM Objectives, in that it would not safeguard the life supporting capacity, ecosystem processes and indigenous species of the Mokihinui River and gorge, and the significant values of wetlands within the gorge would not be able to be protected. While mitigation and compensation conditions has been offered, these do not address impacts on aquatic ecology, indigenous habitat and life supporting capacity of the river. I also consider that the application may not be consistent with Objective C1, in that it would not improve integrated management of the interactions between water, land ecosystems and the coastal environment all of which would be degraded to a greater of lesser degree by the MHP.

National Policy Statement for Renewable Electricity Generation

195. The NPSREG has a single objective, as follows:

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.

196. The most relevant NPSREG policies are grouped under the following headings:

- Recognising the benefits of renewable electricity generation activities.
- Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources
- Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities

197. The balance of the policies provide direction on the provisions to be included in regional and district plans, and relevant time frames for their implementation. At the time of writing this evidence, this amendment process is still to be carried out for West Coast regional and district plans.

198. Under Policy A1, the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities must be recognised and provided for. These benefits include avoiding, reducing or displacing greenhouse gas emissions, increasing security of electricity supply, using renewable resources, the reversibility of some generation technologies, and avoiding imported fuels.

199. The MHP would be largely consistent with this policy, although I note that Mr Heaps has questioned both the extent to which the MHP would avoid, reduce or displace greenhouse gas emissions, and the degree to which security of supply is determined by generation as opposed to the transmission network. In my opinion the scheme could not be considered to

be reversible as in practical terms many of the adverse effects on the environment associated with the scheme could only be reversed if the dam was demolished.

200. Policy B1(c) states that meeting or exceeding the government's target for the renewable electricity will require the significant development of renewable generation facilities, and particular regard should be given to this.

201. Policy C1 requires particular regard be given to the need to locate renewables where the generation resource is available, logistical or practical difficulties, existing structures and infrastructure, including grid connections, mitigation opportunities and adaptive management. Policy C2 requires that regard be had to offsetting measures or environmental compensation including those benefiting the local environment and community.

202. I consider that all the matters under Policy B1(c), Policy C1, and Policy C2 are relevant to the MHP and therefore particular regard, or regard, should be paid to them. However, in my opinion they are not determinative of the application as they are equally relevant to all other renewable generation applications, and also must be assessed against the competing provisions of other NPS and Part II of the Act. This is illustrated in the preamble to the NPSREG at page 3 which states:

In some instances the benefits of renewable electricity generation can compete with matters of national importance as set out in section 6 of the Act, and with matters to which decision-makers are required to have particular regard under section 7 of the Act. In particular, the natural resources from which electricity is generated can coincide with areas of significant natural character, significant amenity values, historic heritage, outstanding natural features and landscapes, significant indigenous vegetation and significant habitats of indigenous fauna.

203. The preamble also states that the NPSREG:

does not apply to the allocation and prioritisation of freshwater as these are matters for regional councils to address in a catchment or regional context and may be subject to the development of national guidance in the future.

204. If the MHP were to proceed it would effectively result in the allocation and prioritisation of the entire freshwater resource within the affected section of the river for hydro electricity generation. This allocation and prioritisation process occurs as part of the consideration of the regional consents to dam, divert and discharge water back into the

Mokihinui, and is central to the application. In my opinion that the NPSREG therefore does not apply to this part of the decision making process, and the NPSFM and PRLWP are the relevant policy and planning documents that should be considered in assessing the application and reaching a decision on these matters.

New Zealand Coastal Policy Statement 2010

205. On the evidence of Dr Hicks and …the MHP will have impacts on the coastal environment by cutting the supply of sediment that is transported to the coast by the river. This will affect coastal processes and result in reduction in the coastal delta, potential changes to the estuary and an increase in coastal erosion rates north and south of the Mokihinui river mouth. Meridian has also obtained consents for coastal protection works that will be implemented if the MHP proceeds. These are intended to provide partial protection to properties at Mokihinui village that would be affected by accelerated coastal retreat.

206. Objective 1 and Objective 5 of the NZCPS are relevant to the application. These require that the integrity, form, functioning and resilience of the coastal environment (including estuaries, intertidal areas and land) be safeguarded and sustained, and that coastal hazards are managed by considering managed retreat for existing development subject to risk, and protecting natural defences to these hazards. Objective 6 is also potentially relevant as it enables use and development of the coastal environment. However, this should be in appropriate places and forms and limits, and activities on land should not compromise the potential to protect coastal resources. Policy 25 requires that hard protection structures be discouraged in areas affected by coastal hazards, and Policy 26 provides for the protection of natural defences that protect coastal land uses.

207. Based on the evidence of Dr Hicks and Dr Todd, in my opinion the MHP would result in the integrity, form, functioning and resilience of the coast would being modified through the reduction in sediment supply. I also consider that the protection of coastal resources would be compromised by the resulting increase in rates of coastal erosion, and this reduction in sediment supply would also be at odds with the protection of natural defences (i.e. the existing sediment budget). In addition, hard protection structures would be constructed in front of Mokihinui village to address accelerated coastal erosion issues rather than consideration being given to managed retreat. In my opinion the effects of the

MHP on the coastal environment are inconsistent with Objective 1, 5, and 6 and Policy 25 and 26 of the NZCPS.

West Coast Regional Policy Statement

Chapter 6 Heritage

208. Objective 6 of the RPS provides for adverse effects on heritage and values that contribute to the West Coast's distinctive character and sense of identity to be avoided, remedied or mitigated. Policy 6.1 promotes the protection of heritage values which are defined as including places of special historic, cultural recreational or amenity value. The policy includes a number of criteria for assessing heritage places and sites.

209. On the basis of the evidence of Katharine Watson and Ian Wightwick, the Mokihinui pack track has special historic, recreational and amenity values, and these would inundated by the proposed MHP storage reservoir. Ms Watson considers that the historic values of the area meet several of the criteria under Policy 6.1. Meridian propose mitigation conditions that provide for interpretive material about the historic values of the area along the replacement track up the gorge. As the destruction of the historic sites would result in adverse effects that are not able to be avoided, remedied or mitigated, it is my opinion that the MHP would be inconsistent with Objective 6 and Policy 6.1 of the RPS.

Chapter 8 Water

210. Objective 8.1.1 of the RPS requires the region's water resources to be managed to meet the needs of a range of uses (including future generations) and to safeguard life-supporting capacity. Under Policy 8.1.1 matters to be considered in decisions on water levels, river flows and allocations include the natural range of flows and levels. The effect of demand for water resources on recreational, amenity, ecological and aquatic values, indigenous fauna and trout habitat must also be taken into account. When allocating water, consideration must also be given to providing residual flows that are sufficient to maintain the life supporting capacity of aquatic habitats and provide for aquatic, amenity and habitat values.

211. The proposed dam would disrupt ecological connectivity in the river, destroy existing riverine aquatic habitat in the gorge and replace this with a reservoir, and significantly alter flows and habitat in the lower river. Based on the evidence of Dr Hudson, Dr Allibone, Dr

Kelly, Dr Schallenberg, Dr Death, Mr Willie Shaw, Mr Tim Shaw, and Mr Wightwick the life supporting capacity of the river will be reduced, there will be a loss of habitat for native aquatic fauna and sports fish, and recreational and amenity values will be adversely affected.

Chapter 9 Habitats and landscape

212. The Objectives under Chapter 9 promote the protection of significant indigenous vegetation and habitat, and outstanding natural features and landscapes from inappropriate subdivision use and development. The natural character of rivers is to be preserved, and public access along them is to be maintained or enhanced. I have discussed the effects of the MHP on these matters in relation to the objective and policies of the BDP and PRLWP above. In my opinion, on the basis of the technical evidence the MHP would be inconsistent with the Objectives under Chapter 9.

213. Policy 9.1 requires that natural character be protected from inappropriate subdivision, use and development. The policy sets out a number of criteria for determining whether use and development are appropriate. These include:

- the extent of sporadic development and its effects on natural character;
- the degree and significance of the effects on natural character;
- the practicality of locating use and development away from a river; and
- the extent to which development provides a public benefit.

214. The damming of the river would significantly modify its flow characteristics and inundate all the existing riverine features in the gorge, replacing these with a reservoir. On the basis of my own knowledge of the river and the evidence of Mr Lister, the natural character of the gorge would be highly modified, and will not be protected. In terms of public benefit, the MHP is not necessary to meet future increases in demand for renewable electricity generation, or to reduce or offset carbon emissions from other generators, and it would give rise to significant adverse effects on public lands and conservation and recreational values. In my opinion, any public benefit associated with the project therefore needs to be considered against these other factors. Overall, I consider that the MHP would constitute inappropriate development in terms of the criteria in Policy 9.1.

215. Policy 9.2 provides for the protection of significant indigenous vegetation and habitat, and Policy 9.5 requires that, where necessary, land use activities avoid, remedy or mitigate offsite adverse effects on significant indigenous vegetation and habitat.

216. Policy 9.2 contains a number of matters to be considered when determining whether particular places or areas are significant. The evidence of Dr Lloyd, Dr Leathwick, Dr O'Donnell, Dr Death, Mr Tim Shaw, Mr Willie Shaw and Ms Kath Walker shows that indigenous vegetation and habitat within the MHP footprint meets a number of the criteria for significance under Policy 9.2. The evidence demonstrates that significant adverse effects on this vegetation and habitat would arise from the MHP, and these effects cannot be avoided, remedied or mitigated.

217. Policy 9.4 enables the continued development, use and maintenance of network utilities in or near habitats; however the way that network utilities are defined in the RPS (and the RMA) would appear to preclude the MHP, other than the transmission lines.

Chapter 10 The Coastal environment

218. Chapter 10 includes policies directed towards the preservation of the natural character of the coast and its protection from inappropriate development, and the protection of significant habitat of indigenous fauna. The effects of activities (including development of rivers) that have the potential to reduce whitebait habitats are to be avoided, remedied or mitigated. New development in the coastal environment that is likely to cause erosion or be subject to erosion or erosion or inundation is to be avoided.

219. On the evidence of Dr Hicks and Dr Todd the MHP will modify sediment supply to the coast, and this will accelerate natural processes of coastal erosion. The Mokihinui provides significant habitat for whitebait, and on the evidence of Dr Allibone and Dr Dave Kelly this will be significantly modified if the MHP proceeds.

Chapter 13 Air quality

220. Policy 13.1.1 is to stabilise greenhouse gas emissions from the region in line with national policy. However, if the MHP were to proceed it is unlikely to make a contribution to stabilising greenhouse gas emissions from the region as almost all electricity generated within, or imported into, the region is from renewable sources. In addition, the region

exports over two million tonnes of coal a year, which contributes to global greenhouse gas emissions. Within the region, the MHP will be potentially be a net producer of greenhouse gas emissions as a result of carbon released from energy and materials consumed in construction, and (on the evidence of Dr Schallenberg) by the decomposition of organic material and soils inundated by the proposed reservoir.

Chapter 14 Energy

221. Objective 14 promotes the sustainable management of energy resources. The policies recognise the importance of an adequate supply of energy resources for the West Coast, consistent with the other RPS policies; promote the sustainable management and efficient use of energy; and seek to co-operate with Crown initiatives and policies that promote energy conservation, efficiency, and use of renewable energy.

222. While the MHP would contribute to the supply of energy on the West Coast and is a renewable source of electricity, , on the basis of evidence of Mr Heaps and Dr Clough it does not appear to be essential to the maintenance of this supply or to the achievement of central government's targets for reductions in CO2 emissions, in terms of Policy 14.3. The West Coast already appears to be receiving an adequate supply of electricity, and (as discussed earlier) it would appear that any increase or improvement to that supply to address these policies could be achieved through alternative generation both within and outside the region, as well as energy conservation at the national level. As discussed above, in terms of Policy 14.1, the MHP would also be inconsistent with many of the other policies in the RPS. Taking all these matters into account, I do not consider that the project promotes sustainable management in terms of Objective 14.

Chapter 15 Network Utilities

223. Objective 15 seeks to enable the functioning of network utilities while avoiding, remedying or mitigating adverse effects. The policies recognise the importance of network utilities, provided these are not inconsistent with other RPS policies, and promote their sustainable management and efficient use.

224. This section is mainly applicable to the transmission corridor associated with the MHS. While a transmission utility network will be essential to the MHS, the ecological evidence identifies potential adverse effects on significant indigenous vegetation and habitat along

the route. The transmission route may not therefore be consistent with other policies in the RPS.

West Coast RPS - conclusions

225. Overall, I consider that, overall, the MHP does not give effect to the objectives, and is generally inconsistent with the policies, of the RPS.

Other relevant matters

Proposed National Policy Statement on Indigenous Biodiversity

226. The PNPSIB Objective promotes the maintenance of indigenous biodiversity by protecting areas of significant indigenous vegetation and habitats of indigenous fauna and encourages the protection and enhancement of wider biodiversity values. It also recognises that economic, social and cultural well-being depends on reasonable use of land.

227. Policy 1 states that for the purpose of the PNPSIB, an area of significant indigenous vegetation or habitat is an area or habitat whose protection is important for the maintenance of indigenous biological diversity. Policy 2 identifies additional significant indigenous vegetation and habitat types that local authorities must have regard to in addition to those that are identified in any RPS or plan. These types include: vegetation and habitat associated with wetlands, and habitat of threatened and at risk species. Policy 5 requires that local authorities manage the effects of activities to ensure "no net loss" of biodiversity, and includes the following statement:

For the avoidance of doubt, in accordance with the principles of Schedule 2, there are limits to what can be offset because some vegetation or habitat and associated ecosystems, is vulnerable or irreplaceable. In such circumstances off-setting will not be possible and local authorities will need to take full account of residual adverse effects in decision-making processes.

228. Policy 6 sets out a number of matters to be recognised in order to promote the maintenance of biodiversity outside of identified areas of significant indigenous vegetation and habitat, and to support the resilience and viability of populations and species assemblages within identified areas and habitats. These include recognising the full range of potential adverse effects, mitigating and offsetting adverse effects, and ensuring human-made structures do not adversely impact on indigenous species by interfering with their natural migratory movements

229. The PNPSIB is not yet operative so the weight that can be placed on it is limited. It does not apply to conservation land or the coastal marine area, and is therefore only of relevance to the Mokihinui river below the Forks, and to road reserve areas, as well as some sections of the transmission corridor within the footprint of the MHP. In relation to these areas, it is my opinion that the application would be inconsistent with Policy 5 and Policy 6 in particular in that it would not result in no net loss of biodiversity and would give rise to a range of adverse effects on biodiversity, including interfering with natural migratory movements.

230. As discussed earlier, the terms "offset" and "no net loss" are defined in the PNPSIB. In my opinion, these definitions are also relevant matters for consideration.

New Zealand Biodiversity Strategy

231. The New Zealand Biodiversity Strategy (NZBDS) is a non-statutory national government statement setting out a vision, goals and principles for managing New Zealand's biodiversity. The strategy fulfils in part commitments made by NZ under the Convention on Biological Diversity. It provides a framework for, and informs biodiversity input into environmental legislation, including the RMA.

232. The NZBDS includes several objectives of relevance to the MHP. Objective 1.1 b) states

Promote and encourage initiatives to protect, maintain and restore habitats and ecosystems that are important for indigenous biodiversity on land outside of protected areas.

233. Most of the Mokihinui river and its bed below the Forks, the unformed legal road within the footprint of the MHP, and some areas on the proposed transmission corridor, constitute land outside protected areas. The Mokihinui river ecosystem in particular, is important for the maintenance of indigenous biodiversity

234. Objective 2.1 a) states

Ensure that management mechanisms, including mechanisms under the Resource Management Act and protected area statutes, adequately provide for the protection of freshwater biodiversity from adverse effects on land and in water.

235. In my opinion, because the MHP would not result in the protection of indigenous habitats and ecosystems and freshwater biodiversity, it would not be consistent with the NZBDS

and these Objectives in particular, and this is a relevant matter for consideration under section 104 (1).

National energy strategies and statements

236. The New Zealand Energy Strategy 2011-2021 (NZES) and the New Zealand Energy Efficiency and Conservation Strategy 2011–2016 (NZECS) are statements about national energy policy prepared by the NZ government, and I consider that they are relevant matters for consideration.

237. The NZES states that the Government's goal is for New Zealand to make the most of its abundant energy potential, for the benefit of all New Zealand and that this will be achieved through the environmentally-responsible development and efficient use of the country's diverse energy resources. NZES retains the previous government's target that 90% of electricity generation be from renewable sources by 2025 (in an average hydrological year) providing this does not affect security of supply. The strategy has also set a target for a 50 percent reduction in New Zealand's greenhouse gas emissions from 1990 levels by 2050, and states that the New Zealand government is willing to commit to reducing greenhouse gas emissions by between 10 percent and 20 percent below 1990 levels by 2020, if there is a comprehensive global agreement and certain conditions are met.

238. The NZECS states that the Government's energy efficiency target is for New Zealand to continue to achieve a rate of energy intensity improvement of 1.3 percent per annum, and has as an objective an efficient, renewable electricity system supporting New Zealand's global competitiveness. In relation to energy efficiency the NZECS states (at page 25) that

Investing in electricity efficiency and demand management can often be more cost effective than building new supply, and often faces fewer risks. Promotion of electricity efficiency as a priority also recognises that new electricity developments, including renewable electricity development, come at a cost, including their environmental impact.

239. It should be noted that, while generally supportive of renewable electricity generation projects such as the MHP, the energy strategies also place an emphasis on environmental protection and electricity efficiency. I consider that the NZES and NZECS are relevant matters for consideration under section 104 (1).

West Coast Conservation Management Strategy

240. The Conservation Management Strategy (CMS) is a 10-year regional strategy that provides an overview of conservation issues and gives direction on the management of public conservation land, waters, and species for which the Department of Conservation has responsibility on the West Coast, including land and waters in the Mokihinui catchment and along the proposed transmission corridor. The CMS is now operative, and I consider that it is a relevant matter for consideration.

241. Conservation lands within the footprint of the proposed MHP are located within the "Kawatiri Place" in the CMS. The CMS contains a number of desired Outcomes for 2020 for the Kawatiri Place. These outcomes are focused around landscape, biodiversity and recreational values. In relation to geodiversity, landforms and landscapes, the CMS states (page 196):

Kawatiri is one of the more geologically complex parts of the Conservancy, with its great diversity of landforms and varied landscapes. Among its most distinctive features are the deep gorges carved through the coastal ranges by the Buller Kawatiri and Mokihinui Rivers and the rolling uplands of the Denniston and Stockton coal plateau.

For Indigenous biodiversity the CMS includes the following statement (at page 200):

…the Mokihinui River is the seventh-highest ranked river in New Zealand by natural heritage value (Chadderton et al 2004). This reflects the largely intact nature of its catchment vegetation and its environmental richness, which is a product of its diverse geology. The catchment provides important habitat for blue duck whio and contains populations of threatened fish, most notably longfin eel tuna.

242. As outlined in the evidence of Mr Ian Wightwick, the CMS classifies the Mokihinui gorge and upper catchment as Backcountry-remote for recreational purposes. This classification provides access opportunities involving considerable physical challenge, self-reliance and isolation, with little in the way of facilities provided. However, provision has been made for the Old Ghost Road tramping and mountain biking track and associated huts.

243. The CMS outcomes for the Kawatiri Place do not identify, or make any provision for, hydroelectricity development within the Mokihinui catchment. They seek to maintain or enhance the landscape, biodiversity and recreational values of the area. Map 8 in the CMS (Kawatiri Place conservation outcomes) identifies the Mokihinui south branch catchment and several tributaries in the North Branch as a Priority Site for Biodiversity Management

(see Figure one). Under 3.3.3.2 Policy 2 of the CMS , integrated management[17] is to be undertaken for this Priority Site, in conjunction with a number of other sites on the West Coast.

244. Section 3.3.4.2 discusses threats to geodiversity and landscapes generally on the West Coast. It states:

Landforms, landscapes and geologically significant sites are vulnerable to the effects of change from a variety of human activities. Examples of activities that potentially may adversely affect these values include ...development of utilities, infrastructure…

245. Section 3.7.11 of the CMS makes general provision for utilities. The introduction to this section on page 158 notes that utilities may have adverse effects on conservation values. These include fragmentation of ecosystems; loss of habitat (e.g. permanent inundation of terrestrial ecosystems); degradation of freshwater ecosystems (e.g. barriers to fish passage changes to hydrological regimes and sediment loads); alterations to the natural character of the landscape; and changes to recreational opportunities and the type of public use of the area. Policy 3 states:

The development, installation, maintenance and management of utilities on public conservation lands should be consistent with the desired outcome for the relevant place.

246. I consider that MHP would be inconsistent with and contrary to the CMS, in that no provision is made for such a development within the Kawatiri Place, and if it proceeded the scale and range of adverse effects on conservation values would be such that the outcomes for Kawatiri place could not be achieved. It would also be contrary to Policy 3 under section 3.7.11 of the CMS. While the BES would potentially assist in achieving some of the matters under Policy 3.3.3.2 Policy 1 in respect of the Mokihinui Priority site, these would only provide a degree of additionality to existing and proposed DoC management activities . In my opinion the MHP would not provide for the integrated management of the site in that it would not maintain the full range of habitats for species or contiguous sequence of ecosystems that currently exists in the catchment, or maintain representative

[17] While the CMS does not spell out what "integrated management" entails at the level of the identified site, the CMS glossary definition refers to ensuring that "that the effects of each activity on others are considered and managed accordingly". Some further guidance is provided through the matters to be taken into account under 3.3.3.2 Policy 1 (although these do not necessarily apply just to priority sites). These include: preventing the loss of species and of the full range of their habitats and ecosystems; maintaining contiguous sequences of ecosystems and representative examples of their full range; maintaining populations of species habitats and ecosystems with unique or distinctive values; active recovery of threatened species, and restoration of their habitats, and ecosystems generally; maintain of the integrity of ecosystems; and protection of indigenous fish and their habitats.

examples of the full range of indigenous ecosystems and protect their integrity, or protect freshwater fish habitats. In my opinion, the CMS should be accorded some weight as it provides a significantly greater level of planning detail in respect of the public conservation lands affected by the MHP than the BDP. In this regard I consider that the following statement in the BDP at 4.8.9.3 also has relevance:

The Council has little direct management control over many natural areas. Primary management responsibility rests with the Department of Conservation.

Te Runanga o Ngai Tahu Freshwater Policy

247. The Te Runanga o Ngai Tahu Freshwater Policy outlines the environmental outcomes for freshwater sought by Ngai Tahu, and the means by which Ngai Tahu intend to work with resource management agencies to achieve these outcomes. Part Two of the strategy sets out the priority issues for freshwater management, the goals and objectives, and suggested strategies for achieving these. Given the significant changes that would occur to the Mokihinui river and its associated ecosystems if the MHP were to proceed, there is the potential for the outcomes sought through these goals and objectives to be impacted on. I consider that this Freshwater Policy, along with PWLMP section 2.14 Identifying Poutini Ngäi Tahu's Issues of Significance are therefore relevant matters for consideration under section 104 (1).

Assessment under Part II of the RMA

248. Where Part II matters compete amongst themselves, regard must be had to the statutory hierarchy between sections 6, 7 and 8. However, based on the principle laid down by the High Court in *NZ Rail v Marlborough District,* section 6, 7 and 8 matters are subordinate to the primary purpose of the Act in section 5. A balancing and weighing process must be applied to determine what best achieves the purpose of the Act. I therefore discuss the proposed MHP in the context of relevant parts of sections 6, 7 and 8 below, before returning to a discussion of section 5.

Section 6

249. Section 6 (Matters of national importance) states:

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:
I consider that section 6 (a) – (f) are all relevant to the proposed MHP.

250. Section 6 (a) recognises and provides for:

The preservation of the natural character of … rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

On the basis of the evidence of Mr Rough, Mr Lister, and Mr Williams and my own knowledge of the area, the Mokihinui gorge and the river and its tributaries have very high natural character, with only minor cultural influences from past mining activities evident. The natural character of the gorge contributes to its wider landscape and habitat values, and amenity for recreational activities such as fishing, kayaking, rafting and tramping. On the evidence of Mr Lister and Mr Williams and the ecological evidence presented by other witnesses for the Director General, it is my opinion that the proposed MHP will give rise to significant adverse effects on the natural character through the damming of the river, inundation of the gorge, and other modifications. These effects would not be able to be avoided, remedied or mitigated, and the natural character of the river and its margins would not be preserved.

251. Section 6(b) provides for:

The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

Mr Lister considers that the Mokihinui gorge is an outstanding natural feature within a wider outstanding natural landscape (ONL) encompassing the Mokihinui catchment. He reaches this conclusion based on the high biophysical (natural science), aesthetic (perceptual) and associative values associated with the catchment. Mr Brown has identified the gorge as forming a component of a wider Tasman mountain ONL, and part of the transmission route as forming a separate ONL. Mr Lister considers that the erection of the dam, creation of the storage reservoir and associated activities will fundamentally diminish the gorge as a natural feature, and would also diminish the qualities that make the upstream Mokihinui Catchment an ONL. It would have significant adverse effects on the natural features and qualities of the gorge, and its outstanding qualities would not be protected.

252. Under section 6 (a) & (b) natural character and outstanding natural features and landscapes are only to be protected from inappropriate use and development. In relation to landscape,

the Environment Court in *Richard Henry Estate v Southland District Council* [C 022/ 03] defined inappropriate development as follows:

We consider that development becomes inappropriate when it diminishes in any significant way the outstanding natural landscape or the reasonable persons perception of it.

253. Mr Lister considers the proposal to be inappropriate because of the high value of the landscape, the loss of the wild river within the gorge, the integrity of the gorge as a natural feature would be fundamentally diminished; and the integrity of the whole Mokihinui as a natural landscape would be diminished taking into account the strategic location of the gorge in that landscape. Dr Williams considers that the MHP dam and reservoir would have a profound and long-lasting effect on the geomorphology and associated geomorphic processes within the Mokihinui catchment, and the entire natural geomorphic system of the Mokihinui River would be disrupted

254. I agree with Mr Lister and Dr Williams. I consider that the MHP will have significant adverse effects on the outstanding natural feature of the gorge and the wider catchment landscape and that this would be inappropriate, taking into account both the intactness and landscape qualities of the gorge itself and the qualities of the broader catchment of which the gorge is an integral component. In my view the erection of the dam and the inundation of the gorge and its associated riverine features and margins with a storage reservoir will significantly diminish its outstanding landscape values, and the perceptions of that landscape by people travelling up the gorge on foot, or down by raft or kayak.

255. Section 6 (c) provides for:

The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

Unlike sections 6(a) and (b) which are qualified by references to "in-appropriate use and development", section 6 (c) is unqualified. Subject to section 5, significant indigenous vegetation and habitat are to be protected. On the evidence of Dr Lloyd, Dr O'Donnell, Mr Tim Shaw, Ms Kath Walker, Dr Kelly and Mr Willie Shaw, the aquatic habitat in the Mokihinui river and gorge is significant habitat for indigenous fauna, and the terrestrial habitat within the footprint of the MHP contains significant indigenous vegetation and habitat. Their evidence and that of Dr Allibone, Dr Hudson and Dr Death shows that there will be significant adverse effects on terrestrial habitat around dam construction site,

within the proposed inundation area, and along sections of the transmission corridor, and that aquatic habitat provided by the river will be significantly modified or lost.

256. The mitigation and compensation proposed does not address many of these effects, and is largely directed the restoration of habitat for native species at another site through the BES. The likely effectiveness of this project at this location, and the degree of additionality it would provide, is unproven. Even if successful, it will not compensate for adverse effects on aquatic habitat, connectivity and ecological functioning of the river or loss of the significant vegetation communities identified in the evidence of Dr Lloyd, the loss of forest habitat for birds and bats identified by Dr O'Donnell, and the seep and tributary habitats identified in the evidence of Dr Suren and Dr Death.

257. In my opinion the application will therefore be inconsistent with section 6(c) because the significant indigenous vegetation and habitat that is affected by the MHP will not be able to be protected.

258. Section 6 (d) provides for
The maintenance and enhancement of public access to and along … rivers:
The dam and reservoir would result in a loss of access along the river and its bed for activities such as fishing, white water kayaking, and rafting. The reservoir would result in the inundation of most of the historic pack track which is the current access route for trampers, walkers and mountain bikers up the gorge.

259. There would be minor compensation for these effects through the provision of landing facilities for boating access up the reservoir, and the (as yet unauthorised) construction of a new tramping and mountain bike track. There will be a significant change in the quality of access to and along the river, and existing recreational access opportunities and amenity associated with the use of the gorge will be lost. In my view, the application would not be consistent with section 6(d) because of this loss of access along the river for existing recreational activities.

260. Section 6(e) states
The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

The Mokihinui is listed as a Poutini Ngai Tahu water body of significance in Schedule 5C to the PRLWP. Its values have been identified as including Waahi tapu and/ or Waiwhakaheke; Waahi taonga; Mahinga Kai; Kohanga; Cultural materials; Waipuna; Traditional Campsite Area. Section 2.14 of the PRLWP also lists Issues and Desired Outcomes for Poutini Ngai Tahu. Some of these outcomes may not be achievable under the MHP, for example "Protection of native fish habitat and spawning areas from adverse effects associated with damming, diversion, water abstractions and discharges to water." I have also commented earlier on possible inconsistencies with the Te Runanga o Ngai Tahu Freshwater Policy. However, I consider that it is for Maori to demonstrate if their relationship with the river would be affected by the MHP.

261. Section 6 (f) provides for: *The protection of historic heritage from inappropriate subdivision, use, and development.*

The evidence of Katharine Watson shows that the historic heritage associated with the pack track, old Karamea Road and mining activities associated with the Mokihinui gorge will be largely lost as a result of inundation by the proposed reservoir. Some of this heritage may be replicated in other parts of the district or the West Coast, but not the values associated with the historic pack track in the gorge, which will not be able to be protected. In particular, on the evidence of Mr Wightwick, the current utilisation of the pack track for access allows its heritage values to be directly appreciated and this contributes the recreational experience of the gorge. In my opinion this experience would be significantly diminished through the inundation of the track, and coupled with the loss of its historic heritage this would constitute inappropriate development.

Section 7

262. Particular regard must be given to the matters under section 7 of the RMA. I consider that all these matters are relevant to the proposed MHP. Section 7 (a) and (aa) provide for *kaitiakitanga* and the *ethic of stewardship* respectively. These are really both sides of the same coin – they are different cultural expressions that are connotative of guardianship or the wise management of resources, for present and future generations. They are strongly linked to section 7 (c) *the maintenance and enhancement of amenity values*; (f) *maintenance and enhancement of the quality of the environment;* (g) *any finite characteristics of natural and physical resources;* and (d) *intrinsic values of ecosystems*.

263. Sections 7 (aa), (a), (f), (g) and (d) are of particular relevance to this application because the MHP would involve extensive modifications to a natural river system. Although there are a number of unmodified river catchments with intact indigenous vegetation communities on the West Coast of the South Island, they are rare across the rest of New Zealand. The Mokihinui also has attributes which set it apart from most other West Coast rivers. These include the assemblage of native fish species, and the quality of its habitat for blue duck, whitebait and eels, unusual plant communities and habitat, the varied geology and form of the catchment, the length and accessibility of the gorge, and the particular recreational opportunities it provides. For these reasons, I consider that the river and its catchment needs to be managed carefully, and in a manner that takes into account a long term view, in terms of sections 7(aa) and (a). In my view, neither of these provisions would be able to be achieved if the river is dammed and the gorge flooded.

264. Natural river systems as represented by the Mokihinui also represent a scarce and finite natural resource in terms of section 7 (g), in contrast to the varied opportunities available for renewable electricity generation, including other hydro, wind, geothermal, and marine development, and energy conservation. The retention of the Mokihinui in its current natural state also provides for the intrinsic values of ecosystems in terms of section 7 (d). The relative lack of human modifications means that the integrity, functioning and resilience of the aquatic and terrestrial ecosystems within the river catchment has been largely retained, in contrast to unprotected and/ or modified catchments in other areas where ecosystems have been disturbed or destroyed. Maintaining these intrinsic values, and the overall natural quality of the environment of the Mokihinui river and catchment in terms of section 7(f), also contributes to the maintenance of its amenity values including the recreational opportunities that are largely based around the natural attributes of the river and gorge, and to the protection of trout habitat.

265. In my view, the application would :

- Not be consistent with section 7 (aa) and (a) of the RMA;
- Not maintain the matters listed under section 7 (c), (d) (f);
- Not recognise the finite nature of the Mokihinui as a natural resource in terms of 7 (g); or
- Not protect the habitat of trout in terms of section 7(h).

266. Under Section 7, regard must also be had to: (b) *the efficient use and development of natural and physical resources;* (ba) *the efficiency of the end use of energy; (i) the effects of climate change;* and *(j) the benefits to be derived from the use and development of renewable energy.*

267. In relation to 7(b) and (ba), I have commented above on the finite nature of natural rivers systems such as the Mokihinui, and contrasted this with the potential opportunities that exist for renewable electricity generation via a wide range of technologies, as well as for energy conservation. Given these alternatives, the relative scarcity of large unmodified river systems in New Zealand, and the extent of the values associated with the Mokihinui river that would be impacted upon by the MHP, I consider that the project would not represent an efficient development of a natural resource. The direct utilisation of the water for electricity generation may be an efficient use of that resource (in terms of energy expended), and local generation may increase the efficiency of end use of electricity (though, for example a reduction in transmission losses). However, the means by which the water is utilised and the associated environmental costs would not appear to be efficient when weighed against the values of the river and the alternatives sites and methods for renewable energy generation that are available and potentially carry lower environmental costs.

268. In relation to sections 7 (i) and (j), the benefits of renewable energy generation are undeniable, and a key benefit is the contribution they make to meeting the social and economic needs of communities while mitigating or reducing greenhouse gas emissions that contribute to climate change. This also provides a benefit in terms of section 7 (f) in that measures aimed at holding or reducing the level of greenhouse gas emissions would maintains or enhance the quality of the environment. If the MHP was the only renewable electricity generation project available these provisions would have to be given considerable weight. However, on the basis Mr Heaps' evidence and my own knowledge of renewable energy projects, alternative generation opportunities, including hydro projects, are available although potentially at a higher cost. In my opinion, many of these alternatives, and in particular geothermal and wind power projects, would have greater reversibility and have significantly lower environmental costs than those associated with the MHP because they do not involve the damming and modification of a highly natural

river and gorge. I therefore consider that while some weight can be placed on section 7(i) and (j) in relation to the MHP, other Part II matters will ultimately be more determinate.

Section 8

269. Section 8 may also be a relevant consideration as the proposed scheme affects natural resources in which tangata whenua have expressed an interest, as discussed above. The Mokihinui is also listed as a Poutini Ngai Tahu water body of significance in Schedule 5C to the PRLWP. On the evidence of Mr Tumahai, Meridian have consulted with Te Runanga o Ngati Waewae in relation to the MHP, and in an agreement has been reached that adequately addresses all Te Rūnanga o Ngāti Waewae's concerns. However, it is also my understanding that there are whanau who will be represented at this hearing who may have a different perspective.

Section 5

270. Section 5 sets out the purpose of the RMA, which is to promote the sustainable management of natural and physical resources. The definition of "sustainable management" under 5(2) embraces the use, development, and protection of natural and physical resources. These are to be managed to enable people and communities to provide for their needs while addressing the matters (sometimes called "bottom lines") set out under 5 (2) (a), (b), and (c).

271. I have assessed the MHP in terms of section 5 taking into account the AEE, the evidence, the relevant planning provisions, and sections 6, 7 and 8 of the RMA. It is my opinion that, while the MHP may be of assistance in enabling the people and communities of the West Coast (and other regions) to provide for their social and economic wellbeing and for their health and safety, the project is not necessary for these goals to be achieved. This is because these needs can currently be met through the existing supply of electricity to the West Coast; there is likely to be a significant increase in generation from other local sources in the future; and other potential options for the generation and supply of renewable electricity to meet future demands exist outside the West Coast.

272. I consider that the proposal would not sustain the potential of the natural resources of the Mokihinui river and gorge to meet the needs of future generations and the proposed activities and associated conditions and mitigation would not safeguard the life-supporting

capacity of the water and ecosystems affected by the MHP. The project will have significant adverse effects that are not able to be avoided, particularly in relation to natural character, landscape, indigenous vegetation and habitat, heritage and amenity values.

273. For the above reasons it is my opinion that the proposal would not be consistent with section 5 (2) of the RMA.

OVERALL ASSESSMENT AND CONCLUSIONS

274. The proposed MHP would generate up to 100 MW of electricity. In the absence of other sources of supply, this would contribute to social and economic needs and increased energy supply security and efficiency on the West Coast. It would also contribute to the New Zealand government's renewable energy targets and the goal of reducing carbon emissions. However, it is only one of a wide range of renewable electricity generation projects that could be utilised to meet these needs, targets and goals, including proposed new generation capacity that has already been consented on the West Coast.

275. The proposed scheme would give rise to significant adverse effects on the natural resources of the Mokihinui river and gorge, including changes to river flows and processes, loss of life supporting capacity, ecological connectivity and habitat values, alterations to natural character and landscape, destruction of significant indigenous vegetation and habitat, and loss of heritage and amenity values.

276. A number of mitigation and compensation conditions have been proposed to address these effects but in my opinion, the proposed conditions would not avoid remedy or mitigate adverse effects on the environment arising from the proposed MHP.

277. The MHP is non-complying under the BDP, both in respect of particular activities that fail to meet the standards for discretionary activities, and in terms of the overall proposal to construct a hydro electricity generation plant. As a result, all the consents (regional and district) must be bundled as non-complying activities. Collectively, the consents contained within the application fail both "threshold tests" under section 104D in that the adverse effects would be more than minor, and the activities would be contrary to the objectives

and policies of the relevant regional and district plans. On this basis, consent for the application could not be granted.

278. If the application is considered to pass either of the section 104D tests, it must be determined under section 104. It is my assessment that MHP would:

- Give rise to significant adverse effects on the Mokihinui river and gorge and associated resources and values that could not be avoided, remedied or mitigated.
- Overall, be inconsistent with the policies and would fail to achieve the Objectives of the NPSFM, NZCPS, the RPS, the PRLWP, and the BDP.
- Be consistent with the NPSREG, and the NZES, and but inconsistent the NZBS and the West Coast CMA.
- Fail to recognise and provide for section 6 matters, and be inconsistent with a number of section 7 matters, and partly consistent with others.

279. Because of the range and level of adverse effects associated with the MHP that cannot be avoided remedied or mitigated, I consider that it would not sustain the potential of the Mokihinui river and catchment to meet the reasonably foreseeable needs of future generations, or safeguard the life-supporting capacity of its water, soil, and ecosystems.

280. In my opinion the MHP is not necessary to provide for peoples social and economic wellbeing, and for their health and safety, and I therefore conclude that, overall, it is not consistent with the sustainable management purpose of the RMA.

R. C. R Delamore
22/05/2012