

Proposed New Zealand Coastal Policy Statement 2004

<p>Chapter 1 – Policy 1.1.1 It is a national priority to preserve the natural character of the coastal environment by: (a) encouraging appropriate subdivision, use or development in areas where the natural character has already been compromised and avoiding sprawling or sporadic subdivision, use or development in the coastal environment; (b) taking into account the potential effects of subdivision, use, or development on the values relating to the natural character of the coastal environment, both within and outside the immediate location; and (c) avoiding cumulative adverse effects of subdivision, use and development in the coastal environment.</p>	<p>The dynamic West Coast coastal environment is challenging to preserve and maintain the integrity from natural erosion rates.</p> <p>The natural character will change as increased coastal erosion rates continue to threaten Mokihinui settlement. However the long sweeping coastline and natural features and geomorphologic landscapes of will not be compromised.</p> <p>The MHP is not considered to unduly affect the natural character in terms of future settlement patterns, but could accelerate the necessary “retreating” of the Mokihinui settlement.</p>
<p>Policy 1.1.3 It is a national priority to protect the following features, which in themselves or in combination, are essential or important elements of the natural character of the coastal environment: (a) landscapes, seascapes and landforms, including: (i) significant representative examples of each landform which provide the variety in each region; (ii) visually or scientifically significant geological features; and (iii) the collective characteristics which give the coastal environment its natural character including wild and scenic areas; (b) characteristics of special spiritual, historical or cultural significance to Maori identified in accordance with tikanga Maori; and (c) significant places or areas of historic or cultural significance.</p>	<p>The natural character of the coast is dynamic and is predicted to accelerate as a result of the MHP. The degree and timeframe of that change is not an exact science and only through monitoring and research can further knowledge be gained from changes to natural character. To an extent those changes are able to be predicted, such as the lag period from entrapment of sediment and the effect that will have on the coastal margin.</p> <p>Having a priority to protect needs to be tempered (as recognised in Policy 1.1.4) with what is naturally occurring and what (and the level) is induced as a result of the MHP. It is not necessarily the sole responsibility of Meridian to uphold this ‘protection’. However, this is recognised in the application and the technical experts’ audits of the application, and conditions are suggested to address this matter, and to uphold the intent of Policy 1.1.3, as much as practicable.</p>
<p>Policy 1.1.4 It is a national priority for the preservation of natural character of the coastal environment to protect the integrity, functioning, and resilience of the coastal environment in terms of: (a) the dynamic processes and features arising from the natural movement of sediments, water and air; (b) natural movement of biota; (c) natural substrate composition; (d) natural water and air quality; (e) natural bio diversity, productivity and biotic patterns; and (f) intrinsic values of ecosystems.</p>	<p>The dynamic evolving coastal and river mouth environment will be impacted by the MHP, which as stated above is recognised. The degree of effects is not fully known, so the intensity and scale of research and monitoring would benefit in understanding the function of river sediment being carried to the coast and its role in defining the natural character and ecology of the coast and river mouth. Through this monitoring and research the consent authority along with Meridian should be able to maintain the national priority set in Policy 1.1.4.</p>
<p>Policy 1.1.5 It is a national priority to restore and rehabilitate the natural character of the coastal environment where appropriate.</p>	<p>The main issue in respect of Policy 1.1.5 is when it is appropriate to intervene with restoration and rehabilitation of the natural character. In our opinion it is not this provision that should prevent the MHP from proceeding, and that any intervention to maintain natural character is probably going to compromise that character in the first instance. Such dynamic environments need to be accepted as part of the coastlines that communities have developed beside.</p>
<p>CHAPTER 2 - THE PROTECTION OF THE CHARACTERISTICS OF THE</p>	

<p>COASTAL ENVIRONMENT OF SPECIAL VALUE TO THE TANGATA WHENUA INCLUDING WAAHI TAPU, TAURANGA WAKA, MAHINGA MAATAITAI, AND TAONGA RARANGA</p> <p>Policy 2.1.1 Provision should be made for the identification of the characteristics of the coastal environment of special value to the tangata whenua in accordance with tikanga Maori. This includes the right of the tangata whenua to choose not to identify all or any of them.</p>	<p>The CIA has raised questions around a desire to see mitigation plans to address the issues posed by Policy 2.1.1, because “the Dam will trap rakau reaching Tangaroa and result in further degradation of the mauri of the place and nutrients reaching the coasts as part of ecosystem processes.” If this can be achieved, this will assist in meeting Policy 2.1.2.</p>
<p>Policy 2.1.2 Protection of the characteristics of the coastal environment of special value to the tangata whenua should be carried out in accordance with tikanga Maori. Provision should be made to determine, in accordance with tikanga Maori, the means whereby the characteristics are to be protected.</p>	<p>If consents are granted, an advice note may address this aspect</p>
<p>Policy 2.1.3 Where characteristics have been identified as being of special value to tangata whenua, the local authority should consider: (a) (b) The transfer of its functions, powers and duties to iwi authorities in relation to the management of those characteristics of the coastal environment in terms of Section 33 of the Resource Management Act 1991; and/or</p> <p>The delegation of its functions, powers and duties to a committee of the local authority representing and comprising representatives of the relevant tangata whenua, in relation to the management of those characteristics of the coastal environment in terms of Section 34 of the Resource Management Act 1991.</p>	<p>Powers have not been transferred in this case. However iwi and Meridian have achieved an ongoing level of dialogue to address characteristics that have been identified as being of special value to tangata whenua, contained within the CIA.</p>
<p>CHAPTER 3 - ACTIVITIES INVOLVING THE SUBDIVISION, USE OR DEVELOPMENT OF AREAS OF THE COASTAL ENVIRONMENT In summary of the policies:</p> <ul style="list-style-type: none"> • Activities including the use or development of areas of the coastal environment must ensure the maintenance and enhancement of amenity values; • Adoption of a precautionary approach to activities within unknown but potentially significant adverse effects; • Recognition of natural hazards and provision for avoiding or mitigating their effects; • Maintenance and enhancement of public access to an along the coastal marine area. 	<p>The MHP recognises that coastal erosion is an existing natural hazard, management of which can be assisted by monitoring and providing a trigger for when remediation or mitigation is put in place. However, there are a number of uncertainties involved.</p> <p>Within the river mouth and confined to whitebaiting activities, the MHP recognises that bank erosion requires monitoring and where necessary maintenance and enhancements for continued access and associated activities.</p>

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Chapter 4: CROSS BOUNDARY ISSUES AND INTEGRATED MANAGEMENT

<p>OBJECTIVE 4.0 Consistent and coordinated resource management planning processes to achieve effective integrated management of the region's natural and physical resources.</p>	<p>provisions for the region's natural and physical resources. The consents sought pose some practical analytical difficulties in terms of the integrated and consistent management sought from Objective 4.0 and Policy 4. This is highlighted when the submissions from other agencies highlight contrary policy directions. Specifically the Department of Conservation believe that the MHP is contrary to the Conservation Strategy (CMA), and most of Part 2 of the RMA and supporting statutory provisions.</p>
<p>POLICY 4 - Promote co-operation and an integrated approach in the: a) Development of regional and district plans; b) Response to issues that cross regional or district boundaries; c) Inter agency co-operation in the management of natural and physical resources; and d) Collection, sharing and use of information on natural and physical resources.</p>	<p>If integrated processes have occurred and provisions have not been collectively reflected in the plan provisions, this should not penalise any consents sought, as the statutory framework has been set addressing what the WCRC and BDC consider appropriate after (trying) to work with other agencies.</p>

Chapter 5: MATTERS OF SIGNIFICANCE TO POUTINI NGAÏ TAHU

<p>OBJECTIVE 5.1: To take into account the principles of the Treaty of Waitangi in the exercise of functions and powers under the Resource Management Act.</p>	<p>The CIA recognises the efforts made by Meridian and its technical experts to uphold the principals of the Treaty of Waitangi, and the ongoing role they will have working with Meridian, should consents for the MHP be granted.</p>
<p>POLICY 5.1.1 The principles of the Treaty of Waitangi will be taken into account in the sustainable management of natural and physical resources in the West Coast Region.</p>	<p>As above.</p>
<p>OBJECTIVE 5.2: (a) Recognise and provide for the relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga within the West Coast Region. (b) To have particular regard to kaitiakitanga in the management of the use, development and protection of natural and physical resources in the West Coast Region.</p>	<p>The matters pertaining to Objective 5.2 and supporting policies have been considered in the CIA, and it is evaluated that following the acceptance of the recommendations contained within the CIA(below); being:</p> <ul style="list-style-type: none"> • Meridian include Te Runanga o Ngati Waewae in the monitoring programme by conducting with tangata whenua a CHI assessment and providing all information and reports on a regular basis prior to the granting of resource consents. • should the MHP proceed, mitigation off site be developed in the form of coastal protection works. This is likely an irresolvable issue on site. While possibly dredging gravel over the dam could be a condition, given the inherent nature of the MHP design this is unlikely to be economically viable. Develop mitigation plans for bank subsidence prior to granting consents. • Ngati Waewae require a mitigation plan demonstrating how this constraint will be overcome, including the loss of volume of rakau from the felling and floating of reservoir inundation trees and vegetation. • Ngati Waewae require the Cultural Health Index of Streams Methodology to be applied to analyse risk and mitigation in relation to developing solutions to this hazard of tuna mauri
<p>POLICY 5.2.1 Provide for the protection of ancestral land, waahi tapu water, sites and other taonga in consultation with Poutini Ngai Tahu.</p>	
<p>POLICY 5.2.2 Promote resource management decisions and practices which accommodate the economic, cultural and spiritual values which are the basis for the special relationship between Poutini Ngai Tahu and their taonga.</p>	
<p>POLICY 5.2.3 Recognise the role of kaitiakitanga in the management of natural and physical resources on the West Coast.</p>	

	<p>degradation risk as a result of the MHP.</p> <ul style="list-style-type: none"> • Should the MHP proceed, Meridian should develop partnership documents with Te Runanga o Ngati Waewae which will acknowledge the traditional values of Tangata Whenua with the environment and resources. This will strengthen sustainable relationships into the future. • Should the MHP proceed, Meridian should hold any water allocation rights in a private trust structure, the trusts of which should be negotiated in partnership with Te Runanga o Ngati Waewae. Meridian should consider Te Runanga o Ngati Waewae as both a Trustee and beneficiary of water rights within its takiwaa. <p>Whilst some of these recommendations are not able to be legally binding conditions, because they rely on third parties, this does not limit Meridian in taking the option to have side agreements with Te Runanga o Ngati Waewae.</p> <p>In respect to the water rights the consents sought and statutory framework can not entertain allocation rights as requested in the final bullet-point...</p>
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Chapter 6: HERITAGE

<p>OBJECTIVE 6: To avoid, remedy or mitigate actual or potential adverse effects of resource use, development or protection on heritage and archaeological sites and values that contribute to the West Coast's distinctive character and sense of identity.</p>	<p>Objective 6 and supporting Policy 6.1 is very enabling, focussing on avoiding, remedying and mitigating. The inundation (lake) requires mitigation, which is provided in the application by way of recording, relocation (where appropriate) and promotion of that heritage as part of the experience.</p>
<p>POLICY 6.1 Promote the identification and protection of heritage values of the region, which include the following:</p> <ol style="list-style-type: none"> Archaeological sites; Places or areas of special historical, cultural or architectural interest or significance; Places or areas of intrinsic, recreational or amenity value or of visual appeal. <p>Matters to be considered when assessing heritage places or sites include:</p> <ol style="list-style-type: none"> The extent to which the place reflects important or representative aspects of New Zealand history; The level of association of the place with events, persons, or ideas of importance in the history of the (district/region); The importance of the place to Poutini Ngai Tahu; The level of community association with, or public esteem for, the place; The potential of the place for public education; The level of technical accomplishment or value, or design of the place including the rarity of technical accomplishment or design; The symbolic or commemorative value of the place; Whether it is an historic place known to date from early periods of the district's settlement i.e., such items are likely to be included in the schedule; The rarity of the type of historic place; and 	<p>The heritage and archaeological values of the area are noted in the application and if consent is granted the conditions of recording and adopting the archaeological protocol will address the points (a) to (c) of Policy 6.1 and those matters to be considered under (a) to (j). Specific assessments are provided below:</p> <p>The mining history is well represented at a number of sites throughout the West Coast and will not altogether be lost by the MHP.</p>

j) The extent to which the place forms a key part of a wider historical and cultural complex or historical and cultural landscape.	
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Chapter 7: SOILS AND RIVERS

<p>OBJECTIVE 7.1 The sustainable management of soil to meet a range of uses, including the reasonably foreseeable needs of future generations and the prevention of further long-term degradation of the soil resource; and to maintain or restore the soil quality factors that contribute to its life supporting capacity including:</p> <p>a) Soil depth, structure and fertility; b) Soil fauna; c) Organic matter; and to retain soils of ecological, scientific or cultural value.</p>	<p>The MHP will have no significant effects (beyond the area of direct inundation) on soils in terms of soil fertility and productivity. However the removal of vegetation can result in erosion which affects the ecology and cultural values managed through Objective 7.1 The manner of vegetation removal and rehabilitation of the worked area is important to be managed (through the Construction Management Plan) to ensure those effects can be sustainably addressed.</p>
<p>OBJECTIVE 7.2 To avoid, remedy or mitigate degradation of water resources and aquatic ecosystems resulting from the instability, or use or development, of the beds and banks of rivers.</p>	<p>The intent of Objective 7.2 could potentially not be achieved if vegetation removal is not controlled and managed to ensure river margin erosion and loss of soils occurs. Furthermore the starvation of sediment (soils) from downstream of the dam has the potential to affect river, river mouth and coastal erosion over and above that which already occurs, which too would prove inconsistent with Objective 7.2.</p>
<p>POLICY 7. To sustain the potential of the soil and water to meet the reasonably foreseeable needs of future generations, activities will be managed so that adverse effects are avoided, remedied or mitigated, including those effects caused by:</p> <p>(a) Erosion, soil loss or the potential for soil loss; (b) Instability of river channels, land and structures; © Contamination of soil, groundwater and surface water; (d) Long term decline in life supporting capacity of soil and land; (e) Decline in the quality of aquatic ecosystems and other instream values; (e) Damage to the relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga; (f) Damage to ecosystems, including the quality of aquatic ecosystems and other in stream values, landscapes and habitats; (g) Increased flooding and runoff.</p>	<p>The points (a) to (h) need to be accounted for in the management plan regime to ensure that the potential of soils and the function they perform are sustained to meet foreseeable needs of future generations, particularly with a need to focus on contamination, the quality of aquatic ecosystems, cultural values, landscapes and habitat and flood effects.</p>

Chapter 8: WATER

<p>OBJECTIVE 8.1.1 To manage the quantity of the Region's water resources so as to: a) Meet the needs of a range of uses, including the reasonably foreseeable needs of future</p>	<p>Objective 8.1.1 addresses water quantity issues, including those issues associated with the taking of water, change of water levels and flows on the indigenous flora and fauna and on recreational, amenity, intrinsic, ecological, aquatic, and Poutini Ngai Tahu values.</p>
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<p>generations; and b) Safeguard the life-supporting capacity of water and related ecosystems.</p>	<p>The proposal will involve significant changes to water levels, however the MALF is proposed to be maintained, which in effect maintains the environmental flow below the dam for aquatic life and habitat. However the 14 kilometre lake stretch will not flow at an equivalent rate, other than at the lake confluence (head of the lake).</p>
<p>POLICY 8.1.1 When making decisions over water levels or river flows, or allocating water, the Regional Council will consider the following matters: a) The natural availability of the water resource or natural range of levels and/or flows; b) The existing and reasonably foreseeable future demands on water resources; c) Conservation of water and its efficient allocation and use; d) The relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga; e) The potential demand for water resources which could have an effect the following: (i) Recreational, amenity and intrinsic ecological values, (ii) Ecological and aquatic values, (iii) Indigenous flora and fauna. f) Habitats of trout and salmon; g) When allocating surface water resources, residual flows are sufficient to maintain or enhance the life supporting capacity of aquatic habitats and provide for aquatic, amenity and habitat values; h) Existing allocations to resource users and reliance on these for their continued operations; i) Cumulative effects of water extraction; and j) The relationship between water quantity and water quality and the effects that water abstraction may have on the ability of a water body to assimilate waste.</p> <p>Policy 8.1.1 corresponds with Water Policy 8.3.1</p>	<p>Importantly to satisfy Policy 8.1.1 the change in water levels is a significant change from a “flashy” flowing river to that of a lake. The water supply for any take may not be compromised by the proposal, as takes will still be able to be sought from the lake itself, and above and below the lake.</p> <p>Clearly the views of Poutini Ngai Tahu, provided in their submission in opposition, highlight that values associated with their <i>culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga</i> need to be considered. This is somewhat tempered by the CIA that was received after the submission, and it is hoped that iwi will make their position clearer at the hearing.</p> <p>The submission indicates key areas of cultural concern to be the damage by hydro electricity generation schemes. This is addressed in greater detail in Sections 4.4. in 5.5 and the Part 2 RMA analysis in Section 5.6 of this report.</p> <p>The demand management for water resources including the effects on recreational, amenity and intrinsic ecological values, ecological and aquatic values, flora and fauna and habitat require a balanced consideration of what is lost and what can be gained through the development of the MHP. The changes to environments is obvious, and whether those changes constitute upholding Policy 8.1.1 relies very much on the decision making process and conditions of consent to manage water quality.</p> <p>There is little allocation of the water resource in terms of existing consents affected by the proposed take and use.</p> <p>Provided conditions of consent can maintain water quality and a management regime can be developed and understood for future water abstraction, the objectives of Policy 8.1.1 (j) could be upheld.</p> <p>The proposal has no association with geothermal issues (Policy 8.3.1)</p>
<p>POLICY 8.1.2 Where insufficient water exists to meet existing and potential demands, priority be given for firefighting, domestic use and stock water.</p>	<p>The proposal will provide sufficient water to serve the ongoing operation of the dam and generation site. It also has the potential to serve the wider Seddonville community (and possibly others), albeit consent has not been sought for that activity. Also, if existing groundwater abstractions were affected, an opportunity for a water supply is also available, albeit that additional consents would be necessary.</p>
<p>OBJECTIVE 8.2.1 To maintain, and where water quality is degraded, enhance the quality of the region’s surface, ground and coastal water resources by: a) Recognising and providing for the relationship of Poutini Ngai Tahu and their culture and tradition with their ancestral water; b) Ensuring that land and water resources are used and managed so that their life supporting capacity, intrinsic, amenity, recreational and cultural values are maintained or enhanced by :</p>	<p>Generally Objective 8.2.1 does not explicitly cover the anticipated activities proposed by the MHP and specifically the effects on water quality associated with potential anoxic conditions of the lake (water with low dissolved oxygen). The exception to this is in regard to vegetation clearance and earthworks. On this basis Objective 8.2.1 and supporting Policies need to be considered in view of the environments those provisions are intending to create and manage in terms of the consents sought.</p>

<p>(i) Sufficient flow or levels in natural water bodies to achieve desired water quality; and (ii) Avoid, remedy or mitigate the adverse effects of soil loss, erosion and the contamination of water bodies with chemicals, sediment, bacteria or nutrients.</p>	<p>The water quality in the Mokihinui River is recognised as good, which sets a quality base level environment.</p> <p>Maintaining water quality has been considered in the proposal, in managing the anoxic water levels, sediment management, riparian felling and riparian slope management. These factors are key influences over the lake's water quality.</p> <p>As described in the Lake Water Quality and Habitat report the initial effects, and effects within years 1 to 5, will have water quality effects, particularly in the deeper parts of the reservoir (<25m). However, over time this can be improved.</p>
<p>POLICY 8.2.1 Avoid, remedy or mitigate the adverse effects of discharges into surface, coastal and ground water particularly where these cause or are likely to cause: a) Risks to human health; b) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials; c) Any conspicuous change in the colour or visual clarity; d) Any emission of objectionable odours; e) The rendering of fresh water unsuitable for consumption by farm animals; f) Any significant adverse effects on aquatic life; g) Loss of ecological, cultural, aesthetic, fishery, amenity and recreational values; and h) The relationship of Poutini Ngai Tahu and their culture and traditions with ancestral water and other taonga to be compromised. Policy 8.2.1 corresponds with Water Policy 8.3.2</p>	<p>Policy 8.2.1 is focused on managing the resources, and specifically risk to human health, water quality, odours, aquatic life, the ecology, cultural, aesthetic, fishery, amenity and recreational values.</p> <p>The conditions suggested in the form of mitigation measures by the applicant provides some certainty. However, as highlighted by Mr Cameron, water quality within the mixing zone, and the extent of the mixing zone will involve "temporary effects" which challenge the interpretation of the legal term of temporary. Further conditions have been included to assist with mitigation of effects on water quality.</p>
<p>POLICY 8.2.2 To maintain, enhance or restore water quality in surface, coastal and ground water, taking into account: a) The public uses of water resources; b) The sensitivity of the receiving waters to adverse effects; c) The current state of technical knowledge and treatment and disposal options for discharges; d) Existing lawful discharges; e) The relationship of Poutini Ngai Tahu and their culture and traditions with ancestral water; and f) The setting of progressively higher water quality standards water bodies that are unacceptably degraded. Policy 8.2.2 corresponds with Coastal Environment Policy 10.5.1.</p>	<p>The longer term plans from years 2-3 onwards the proposal intends to "restore" water quality in the lake, taking into account the public use, and sensitivity of downstream areas and tributaries.</p>
<p>POLICY 8.2.3 To promote, where appropriate, well-vegetated riparian margins while considering the need to reduce threats caused by flooding and erosion.</p>	<p>The intention of Policy 8.2.3 will be upheld as the lake is filled and the margin of the lake retains an existing layer of understorey. However, the stability provided by larger vegetation and trees will be removed for a band around the lake to accommodate lake fluctuations.</p>
<p>POLICY 8.2.4 To manage land use practices in order to avoid, remedy or mitigate the entry of soil,</p>	<p>Natural processes through the tributaries and catchments of the Mokihinui River will</p>

silt and other contaminants into the region's water bodies.	continue to carry sediment loads into the river and lake, and the proposal will generally not affect the catchment's land uses. The main potential issue relates to shoreline erosion, of which little is understood, and any major natural hazard event.
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Chapter 9: HABITATS AND LANDSCAPES

OBJECTIVE 9.1 To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna.	Objective 9.1 recognises that indigenous vegetation on the West Coast has diminished over time and significant locations of habitats and fauna need to be protected. The applicant indicates that this resource is well represented elsewhere in the region; that those specific indigenous vegetation and habitats listed, are involved in the MHP in comparatively limited ways; and that mitigation can ensure that areas can be reinstated or effects offset elsewhere.
OBJECTIVE 9.2 To protect the outstanding natural features and landscapes of the West Coast from inappropriate subdivision, use and development.	Achieving Objective 9.2 and upholding Policy 9.1 (specifically 9.1(e)) requires that “ <i>territorial authorities will be required to use these [inventories, schedules of outstanding natural features and landscapes] in district plans.</i> ” On the basis that Mokihinui gorge and river are not listed as an outstanding natural landscape or feature, consistency with Objective 9.2 is uncertain. In the absence of such schedules or inventories, reliance on the matters listed under Policy 9.1 is required.
OBJECTIVE 9.3 To preserve the natural character of the wetlands, lakes and rivers.	Dr Stevens makes it clear that in his opinion the very nature of the MHP (inundation of the gorge) will contravene Objective 9.3. The position Mr Rough presents is that the replacement environment will provide, and contribute to a “natural character” that over time will be acceptable. In our opinion, this overlooks the statutory imperative that preservation by its definition involves the need to ‘maintain’ or ‘keep alive’ the existing natural character.
OBJECTIVE 9.4 To maintain and enhance public access to the coastal marine area, rivers, lakes and their margins.	Objective 9.4 and Policy 9.7 addresses that access to some areas of public access to rivers and their margins is inadequate. Objective directs to maintain and enhance access. The MHP would generally achieve this.
<p>POLICY 9.1</p> <p>Preserve the natural character of the West Coast's wetlands, lakes and rivers and their margins and protect them, and outstanding natural features and landscapes, from inappropriate subdivision, use and development.</p> <p>In deciding whether subdivision, use and development are inappropriate matters to be considered will include the following:</p> <p>a) The degree to which the adverse effects of the discharge of contaminants can be avoided, remedied or mitigated, through provision of adequate services, particularly the disposal of wastes;</p> <p>b) The extent of sporadic development and its effects on natural character;</p> <p>c) The degree and significance of actual, potential and cumulative effects on natural character that arise;</p> <p>d) The extent to which the subdivision, use and development recognises and provides for the relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water,</p>	<p>The net effect of changing a 14 km stretch of river to a lake is a significant change to the natural character and not preservation of the existing natural riverline environment, but rather involves an exchange and change of natural values that are not directly comparable. For this reason the proposal does not uphold Policy 9.1, nor Objective 9.2</p> <p>Detailed comments are set out below.</p> <ul style="list-style-type: none"> • The extent of the discharges from the proposal suggest effects can be mitigated. • Downstream of the dam, sediment, loss and starvation of river loads that contribute to aquatic life and habitat downstream of the dam wall will occur. This will be a loss in natural character in the lower river.

<p>sites, waahi tapu and other taonga;</p> <p>e) The practicality of locating any subdivision, use or development away from the areas of significant indigenous vegetation and significant habitats of indigenous fauna (policy 9.2), the coastal environment, wetlands, lakes, and rivers and their margins, where adverse effects on natural character can be avoided, remedied or mitigated to a greater degree or extent;</p> <p>f) The extent to which any subdivision, use or development provides a public benefit;</p> <p>g) The degree to which the subdivision, use or development will be threatened by, or contribute to, the occurrence of natural hazards; and</p> <p>h) Where rehabilitation plantings are required, the practicality of using indigenous species, preferably of locally derived stock.</p> <p>In deciding whether a natural feature or landscape is outstanding matters to be considered will include the following:</p> <ul style="list-style-type: none"> a) Its use, value or degree of representativeness of/for scenic, amenity, recreational, heritage, intrinsic and scientific purposes; b) Its association with areas of significant indigenous vegetation and significant habitats of indigenous fauna (see policy 9.2); c) The significance of its association with the coastal environment, wetlands, lakes and rivers and their margins; d) The relationship of tangata whenua and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga; and e) The inclusion or exclusion of a water body from a water conservation order. <p>Policy 9.1 corresponds with policy Coastal Environment Policy 10.1.1.</p>	<ul style="list-style-type: none"> • This large scheme consolidates development on probably the best opportunity to generate electricity from hydro generation in this location, compared to alternative micro (potentially sporadic) schemes. • The natural character will be affected, albeit not in a cumulative manner, but the scale (degree) of the scheme. • Significantly by (d) is a difficult matter, as clearly opening up the opportunity for iwi to traverse environments can better connect them with the rohe of the natural resources they are associated with, balanced against that lost from conserving the environment in its current state (whitebait and eels may be of particular concern). • Any hydro development, particularly on the West Coast is more than likely to have some effect on indigenous vegetation, habitat and fauna because of the typical environments, topography and nature of hydro schemes. This makes some mitigation of adverse effects necessary for any/most schemes. The MHP has a suite of suggested conditions and (by way of what is proposed) has attempted “to a greater degree or extent” to be mitigated. However the area has significant indigenous vegetation, significant habitats of rare and endangered species, and involves rivers and the coast. Loss of natural character is considered significant, regardless of mitigation. • The public benefits of the MHP have been outlined, which requires a weighing up of the negative implications of the scheme, on what a small portion of the public, to the wider benefits to a greater proportion of the public. • Rehabilitation is proposed as mitigation in the key areas; staging area, dam and transmission, along with weed control of invasive species which will be necessary to encourage indigenous species as part of the rehabilitation planning. <p>The application has placed a lot of weight on the assessment that the use, value or degree of representativeness of the subject environment is well represented elsewhere on the West Coast (region). This view is not shared by Dr Stevens or Dr Espiner.</p>
<p>POLICY 9.2 - Recognise and provide for the protection of significant indigenous vegetation and significant habitats of indigenous fauna. Matters to be considered as a guide for decision making include those that follow, any one of which may determine whether areas of indigenous vegetation and/or habitats of indigenous fauna are “significant”.</p> <ul style="list-style-type: none"> a) The desirability for their protection by statute or covenant; b) Protection status, including reserves created under the West Coast Accord; c) The degree to which the area is representative of an association of species or an ecosystem that is typical of the region; d) The likelihood of the area retaining its viability, quality and integrity of processes over a long time 	<p>The subject area has not been well protected by statutory environmental provisions under the RMA, but the required consents set the statutory framework for the level of assessment matters and decisions. Because of this assessment level the significance of vegetation, habitat and fauna is not compelling, or differentiated from the majority of other West Coast indigenous vegetation, habitat and fauna.</p> <p>The Mokihinui Gorge and wider area of Seddonville and the Stockton Plateau, including Cedar Creek, is likely to retain some of its viability, quality and integrity over long periods</p>

<p>period;</p> <p>e) The presence or absence of an indigenous species or community of indigenous species that is rare or threatened regionally or nationally;</p> <p>f) The degree to which the area is distinctive in terms of indigenous species that are unusual, endemic, or that reach a distribution limit in the region;</p> <p>g) The extent to which the area has been modified from a natural state or affected by weeds or pest species;</p> <p>h) Its connection with other areas of significant indigenous vegetation or significant habitats of indigenous fauna;</p> <p>i) Its contribution to the avoidance or mitigation of natural hazards;</p> <p>j) Its use or value on a local, regional or national scale for public access, recreation, amenity and heritage purposes;</p> <p>k) The relationship of Poutini Ngai Tahu and their culture and traditions with their ancestral lands, water, sites, waahi tapu, mahinga kai and other taonga;</p> <p>l) The contribution of the area or habitat to maintenance and enhancement of ecological and reproductive processes water quality, water flow and soil conservation;</p> <p>m) The relationship of the area or habitat to any water body included in a water conservation order;</p> <p>n) Whether they occur near wetlands and estuaries;</p> <p>o) The importance to migratory species, including whitebait; and</p> <p>p) The relevance of ecological districts in relation to matters ©, (e) and (f).</p> <p>Policy 9.2 corresponds with Coastal Environment policy 10.1.2.</p>	<p>once the lake and its changed environment develops an equilibrium state between modified and natural environments.</p> <p>Indigenous species or communities of indigenous species is tabled (page 68) in the AEE, and noted to not exist in large numbers which in our view does not necessarily mean the degree of distinctiveness is minor, and therefore the mitigation of predictor control programmes are questionable as to whether they can offset the effects by establishing more appropriately locations of indigenous species or community of indigenous species.</p> <p>The Mokihinui Gorge has been modified from its natural state by natural events, including earthquakes, landslides and the fluctuating flows that occur in the river itself.</p> <p>Connection with the total footprint of the MHP is significant, however the proposal will not restrict this to any more than a minor effect, except potentially in terms of fish species where the dam is a major impediment as described by Mr Cameron.</p> <p>Mr Beale has made some cross references to the contribution vegetation has in terms of potential natural hazards, and this is further supported in the engineers working in the consortium.</p>
<p>POLICY 9.3 Have particular regard to the protection of the habitat of trout and salmon.</p>	<p>The MHP raises less concern in terms of trout in comparison to native fisheries. The key issue in protecting trout is the change in aquatic habitat that supports trout in the future (lake) environment and that upstream of the dam.</p>
<p>POLICY 9.4 Enable the continued development, use and maintenance of network utilities in or near habitats and landscapes.</p> <p>Policy 9.4 corresponds with Coastal Environment policy 10.1.3.</p>	<p>The MHP does not constitute the “continued development” of network utilities because the utilities are not present, and is thus not directly relevant.</p>
<p>POLICY 9.5 Promote, and where necessary require land use practices which avoid, remedy or mitigate offsite adverse effects on areas of significant vegetation and significant habitats of indigenous fauna and outstanding natural features and landscapes. Such practices include:</p> <p>a) The judicious application of fertiliser and agrichemicals;</p> <p>b) Reducing discharge of contaminants into water from land uses; and</p> <p>c) Stock control procedures to prevent excessive stock entry into water bodies and into significant indigenous vegetation.</p>	<p>Policy 9.5 is not relevant, and primarily relates to agricultural activities.</p>
<p>POLICY 9.6 Promote the containment and reduction of noxious and potentially noxious pests and weeds in situations where they cause, or are likely to cause, adverse effects, including:</p>	<p>Weed pests may result from this proposal. Conditions could be attached to limit conflict with this policy.</p>

<p>a) Destruction or degradation of indigenous flora or fauna; b) Reduction in biodiversity; c) Land instability; and d) Spread within waterways.</p>	
<p>POLICY 9.7 Facilitate the maintenance and enhancement of public access to and along the margins of lakes and rivers, except where restrictions are necessary to: a) Protect or maintain areas of significant vegetation and significant habitats of indigenous fauna; b) Protect the cultural and spiritual values of Poutini Ngai Tahu including mahinga kai; c) Protect public health and safety; d) Ensure a level of security consistent with the purpose for a resource consent; and e) In other exceptional circumstances sufficient to justify the restriction, notwithstanding the national importance of maintaining that access. Policy 9.7 corresponds with Coastal Environment policy 10.1.4.</p>	<p>The application promotes the positive effects of public access along the gorge and surrounds that is more accessible, and of a standard to serve a wider array of recreational interest groups and individuals than at present. However, greater access may adversely impact on habitats of blue duck and kiwi.</p> <p>The MHP raises some concerns in terms of this policy.</p>

Chapter 10: The Coastal Environment

<p>OBJECTIVE 10.1: Allow appropriate subdivision, use and development in the coastal environment which avoids, remedies or mitigates adverse effects on the natural character of the coastal environment and on any outstanding natural features and landscapes.</p>	<p>No physical development work is proposed in the coastal environment (CMA) by the MHP, other than within the river margins if bank erosion occurs. Therefore the MHP is not considered inconsistent with Objective 10.1.</p>
<p>POLICY 10.1.1 Preserve the natural character of the West Coast's coastal environment and protect it, and outstanding natural features and landscapes, from inappropriate subdivision, use and development.</p> <p>In deciding whether subdivision, use and development are inappropriate matters to be considered will include those listed under the corresponding part of Habitats and Landscapes Policy 9.1 and the following: (a) The extent of noise generated by activities in the CMA; (b) The contribution that open space makes to amenity values in the coastal environment; and © The relevance of NZCPS policies 1.1.1-1.1.4.</p> <p>In determining whether a natural feature or landscape is outstanding matters to be considered will include those listed under the corresponding part of Habitat and Landscape Policy 9.1.</p>	<p>Determining if the MHP development is inappropriate because of the resulting effects of sediment starvation and potential acceleration of coastal erosion can not really be determined until the level of mitigation is decided in the future between Meridian and WCRC.</p> <p>The coastal environment, noise, open space, and natural features and landscape will not, in general, be compromised by the MHP so the intent of Policy 10.1.1 is achieved.</p>
<p>POLICY 10.1.4 Facilitate the maintenance and enhancement of public access to and along the coastal environment except where restrictions are necessary to:</p>	<p>Public access will generally not be affected by the MHP in the coastal environment. Where riverbanks are affected the MHP provides for monitoring and improvement works to reinstate access, primarily for whitebaiters, but also for the wider public enjoyment of the coastal</p>

<p>a) Maintain or facilitate port development and operations;</p> <p>b) Protect or maintain areas of significant conservation value;</p> <p>c) Protect the cultural and spiritual values of Poutini Ngai Tahu, including mahinga kai;</p> <p>d) Protect public health and safety;</p> <p>e) Ensure a level of security consistent with the purpose for a resource consent;</p> <p>f) In other exceptional circumstances sufficient to justify the restriction, notwithstanding the national importance of maintaining that access.</p>	<p>environment where it extends up the river.</p>
<p>OBJECTIVE 10.2. The control of practices which damage whitebait habitats and the promotion of practices that enhance them.</p>	<p>The proposal raises potential significant issues in terms of Objective 10.2..</p>
<p>POLICY 10.2.1 To avoid remedy or mitigate the effects of activities which have the potential to reduce whitebait habitats including:</p> <p>a) Further inappropriate, subdivision, use or development of relevant rivers, streams and wetlands and their margins (see Habitats and Landscapes Policy 9.1 for matters to be considered when determining what is inappropriate);</p> <p>b) Drainage, impoundment, reclamation or diversion of water; and</p> <p>c) Discharge of contaminants into water.</p>	<p>Some mitigation has been provided by the MHP as catchment flows will be simulated at the point of discharge from the dam to ensure downstream whitebaiting remains viable. The potential effects on whitebait over longer term periods however remains a concern, and has the potential to compromise the intent of Policy 10.2.1.</p>
<p>POLICY 10.2.2 Ensure that the Department of Conservation and Poutini Ngai Tahu are consulted over all aspects of the protection and enhancement of habitat to support the whitebait fishery.</p>	<p>DoC and iwi have been consulted and have made submissions, albeit not concerning whitebait, but indirectly the aquatic habitat. Meridian's consultation has maintained the intent of Policy 10.2.2, and if consented, this should be ongoing.</p>
<p>OBJECTIVE 10.4 The avoidance of environmental and property losses due to erosion and inundation.</p>	<p>The Mokihinui community is already affected by coastal erosion and threatened by potential property losses. The MHP will accelerate that effect, thereby not being able to "avoid" such effects and being inconsistent with Objective 10.4.</p>
<p>POLICY 10.4.1 To avoid those forms of new development in the coastal environment that are likely to contribute to, or cause coastal erosion, or are likely to be subject to erosion or inundation, recognising that some natural features may migrate inland as the result of dynamic coastal processes (including sea level rise).</p>	<p>The application indicates that, if after monitoring coastal erosion rates, the MHP is proven to accelerate coastal erosion the applicant will work with the WCRC to address the effects. This is a reactive response, rather than 'avoiding' an activity that causes coastal erosion, inundation, and effects on natural features.</p>
<p>POLICY 10.4.3: Ensure that the best practicable options for the future are adopted to manage coastal hazards.</p>	<p>Coastal hazards have been addressed by the applicant and the consortium to identify the most practicable options for managing coastal hazards as a result of the MHP, including research and monitoring, and actions such as an emergency response plan.</p>
<p>POLICY 10.4.4: Avoid uses and developments that increase coastal hazards.</p>	<p>The MHP has the potential to accelerate coastal erosion and in turn the associated coastal hazards, which will be contrary to Policy 10.4.4.</p>
<p>POLICY 10.4.5: Adopt a precautionary approach towards proposed activities where their effects are as yet unknown or little understood, or where the effects of coastal processes on those activities are as yet unknown or little understood.</p>	<p>Policy 10.4.5 has been included in the RPS to give effect to Policy 3.3.1 (Policy 5 of the Proposed of the NZCPS). The precautionary approach is where coastal environmental effects are <i>uncertain, unknown or little is understood but whose effects are potentially significantly adverse to that environment</i>. The MHP presents a very uncertain effects assessment and this is why monitoring is proposed followed by appropriate mitigation. However the extent of mitigation needed, party responsible to mitigate is also not clearly</p>

	defined.
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Chapter 11: NATURAL HAZARDS

OBJECTIVE 11. The protection of human life and the avoidance or mitigation of damage to property and environmental values resulting from natural hazards.	Dam break has the greatest potential scope to compromise Objective 11, particularly in terms of inundation hazard effects on downstream communities.
POLICY 11.1 Promote appropriate responses when a natural hazard is possible, likely to occur or imminent including: a) Timely warning and advice; b) Evacuation of people and stock from high risk areas; c) Mobilisation of rescue and welfare groups; and d) Identification of at risk areas.	The design and the construction methodology of the dam attempts to address the primary concern of dam break. However the risk analysis that has been provided and responded to leaves some uncertainty as to the acceptability of responses, given time, magnitude of evacuation, and mobilisation of civil defence. Achieving this policy would prove difficult until communities are set up to deal with such an event.
POLICY 11.2 Recognise the risks to proposed and existing development from natural hazards and promote measures to reduce this risk to an acceptable level. Where necessary further development in hazard-prone areas will be restricted (refer Policy 11.3).	Determining if the MHP can uphold the intent of Policy 11.2 and 11.3 is difficult in the absence of fully developed plans.
POLICY 11.3 Consult with people and communities directly affected when making decisions on levels of risk from natural hazards. When making decisions on levels of risk matters to be considered will include: a) The probability of occurrence, magnitude and location of events; b) The potential consequence of an event including potential loss of life, injury, social and economic disruption, civil defence implications and cost to the community; c) The measures proposed to avoid or mitigate the effects of the event, the degree of mitigation they will provide and effects on the environment from adopting such measures; d) The benefits and costs of alternative mitigation measures; and e) The possibility of locating activities away from areas at risk.	Consultation prior to lodgement and the consent process has initiated communication with affected parties associated with risk from natural hazards. The risk analysis provided in response to the RFI addresses Policy 11.3 (a) to (e), but is challenged particularly in the social impact evaluation undertaken by Ms Buchan. It is considered that, on balance, risk can be adequately addressed in terms of probability and consequence, but community acceptance and alternatives is still at a level of uncertainty.
POLICY 11.4 Adopt a user pays approach to hazard avoidance or mitigation.	Bonding for natural hazards is not common practice when insurance should cover the risk of natural hazards. However in stating this, a bond based on the performance of the dam should ensure a user pays approach to mitigation, and that an incentive is maintained to uphold Policy 11.4 to provide mitigation of risk effects.

Chapter 12 Minerals

OBJECTIVE 16.1 Options for the evaluation, use and development of mineral resources are not	Objective 16.1 and 16.2 needs to be considered collectively as the MHP can be considered in
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unnecessarily hindered while other natural and physical resources are sustainably managed.	two areas in terms of effects on minerals. The Lake development will make mineral exploration more difficult, but not necessary hindered. The transmission line development across Stockton Plateau, being within a mining licence area will may have some effect on the mining operations.
OBJECTIVE 16.2 The ability to evaluate mineral resources is protected.	
POLICY 16.1 Recognise known mineral resources and have regard to the effects of changes in land use patterns on potential options to extract them when making resource management decisions.	The known minerals are predominantly coal within the coal mining licence area of Stockton Plateau. It is considered that the gold mining historically known in this area is not feasible at the present time. This requires recognition of the effects of transmission lines, alignment and towers could have on existing and consented/permitted coal mining operations. The two activities are in our view not entirely incompatible but protection of SENZ operations and plans need to be accommodated to meet the intent of Policy 16.2.
POLICY 16.2 Recognise that the extraction of mineral resources may be incompatible with other land uses and vice versa.	

Chapter 13: AIR QUALITY

OBJECTIVE 13.2 Maintenance or improvement of air quality at or to levels that safeguard human health, environmental quality and amenity values.	Air discharges are only associated with construction and maintenance activities (includes dust and emissions from plant) at the dam site, which actual and potential effects will be managed to uphold the expectations of Objective 13.2.
POLICY 13.2 Standards in the Ambient Air Quality Guidelines will be used as the lowest allowable limit of air quality on the West Coast.	The receiving environment from the construction is not particularly sensitive to air quality changes, and the nearest community is sufficiently distant that air quality will be unaffected, thereby being consistent with Policy 13.2

Chapter 14: ENERGY

OBJECTIVE 14 To promote the sustainable management of energy resources.	Objective 14 anticipates that the Council take a balanced view between the need for electricity generation on the West Coast and that of sustaining the natural and physical resources (ie, in terms of the “use, development and protection” of such resources). The RPS explains that “hydro power has the perceived advantage of being more environmentally acceptable than production from non renewable sources”. However, it is also noted that this advantage “needs to be weighed up against possible disadvantages such as flooding of land, destruction of natural values and changes in water flows and levels”. This promotes evaluating a “balanced scorecard” between two very different values, but being able to justify a balanced outcome that promotes (enables) energy as a resource.
POLICY 14.1 Recognise the importance of an adequate supply of energy resources for the needs of people and communities on the West Coast, provided that this is not inconsistent with other policies	

in this RPS.	
Policy 14.1 corresponds with Network Utilities policy 15.1	
Policy 14.2	
Policy 14.3	Importantly, the MHP illustrates that WCRC is required under Policy 14.3 to co-operate with Crown initiatives. Section 1.6 of the application sets out the governments aims and ambitions for renewable energy and how MHP upholds and contributes to those objectives. Approval of schemes like MHP (renewable energy initiatives) would satisfy this Policy.
Policy 14.4 Not relevant	

Chapter 15: NETWORK UTILITIES AND TRANSPORT SYSTEMS

OBJECTIVE 15: Enable the functioning of network utilities and transport systems, while avoiding, remedying or mitigating adverse environmental effects.	Objective 15 enables the functioning of network utilities, which assumes the initial development (in terms of supply) has or can occur. In terms of the MHP the management plan approach and environmental monitoring is important in terms of managing adverse effects.
POLICY 15.1 Recognise the importance of network utilities and transport systems for the needs of people and communities, provided that this is not inconsistent with other policies in this RPS. Policy 15.1 corresponds with Energy Policy 14.1.	Affordable electricity is important for communities and associated economies to sustain their existence, along with that of the electricity network providers. In theory with greater efficiency and less transmission losses the potential is for more lower cost electricity, however the certainty of that can only be achieved through third parties, some of whom are submitters in support of the application. Those electricity retailers may be able to further confirm that this is a real possibility. However, the issue of inconsistency with some other policies remains.
POLICY 15.2 Promote the sustainable management and efficient use of network utilities and transport systems within the region. Policy 15.2 corresponds with Energy Policy 14.2.	The inefficient transmission of electricity to the West Coast is a driver of the MHP, which as a electricity generation (supply) close to the demand would promote efficient transmission within the region, thereby being consistent with Policy 15.2.

Chapter 16: MINERALS

OBJECTIVE 16.1 Options for the evaluation, use and development of mineral resources are not unnecessarily hindered while other natural and physical resources are sustainably managed.	Objective 16.1 is not directly complied with, given MHP will inundate areas that have the potential for exploration, thereby making evaluating options very difficult if not impossible. However, this is unlikely to be a significant issue.
OBJECTIVE 16.2 The ability to evaluate mineral resources is protected.	To consider protection of mineral resources requires consideration of the potential mineral extraction. The Mokihinui Gorge has historically been mined and the probability of further exploration is limited as no mining licence occupies the gorge.
POLICY 16.1 Recognise known mineral resources and have regard to the effects of changes in land use patterns on potential options to extract them when making resource management decisions.	The Stockton Plateau which does have a mining licence will not be unduly compromised by the transmission. The overhead transmission should still enable the licence holders to undertake their activities.
POLICY 16.2 Recognise that the extraction of mineral resources may be incompatible with other land uses and vice versa.	There are some potential effects, such as dust on lines that have the potential to reduce compatibility. However, it is noted that SENZ have withdrawn their submission, which (while

	this does not constitute support for the MHP) signals that there are no significant concerns that would be otherwise considered through this consent process.
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Regional Air Quality Plan

Chapter 7 Dust

OBJECTIVE 7.3.1 The protection of human health, property, structures and ecosystems from the adverse effects of discharges of dust to air.	The proposed activities associated with air discharges relevant to Objective 7.3.1 are construction and maintenance activities. Dust emissions will primarily relate to traffic, earthworks, including processing aggregate and dam construction. The most sensitive receiving environments are the Mokihinui River and the surrounding ecosystems. This is because of the remote nature of the site from human (communities), properties and other structures.
POLICY 7.4.1 Adverse effects of the deposition of dust will be avoided, remedied, or mitigated by ensuring that any discharge of dust does not occur at a volume, rate or in a manner that could cause an offensive or objectionable effect, including the significant restriction of visibility or the soiling of property.	There will be some temporary effects from fugitive dust as the access roads are upgraded and developed. These temporary effects will be mitigated by water tankers suppressing dust where necessary, which forms part of typical construction management processes. The dust from haul roads and the upgraded Seddonville Road will be mitigated by the condition of the roads, and by construction management plans including to dampen fugitive dust that could have adverse effects. This mitigation would ensure consistency with Policies 7.4.1 and 7.4.2.
POLICY 7.4.2 Adverse effects of suspended dust will be avoided, remedied, or mitigated by ensuring that any discharge of dust does not occur at a volume, rate or in a manner that could cause an offensive or objectionable effect, including the impairment of human health.	Suspended dust would be addressed in the same way as deposited dust – see above.
POLICY 7.4.3 In assessing offensive or objectionable effects from discharges of dust, the Regional Council will take into account the following factors: <ul style="list-style-type: none"> • Frequency of dust discharges; • Intensity of dust discharges; • Duration of dust discharges; • Offensiveness of the odour; • Extent of dust discharges (suspended and deposited); • Location of dust discharges. 	The expected monitoring requirements of the construction management plan will account for each of the factors listed
POLICY 7.4.4 To avoid, remedy or mitigate the adverse effects of the discharge of dust and materials on air and water quality and the seabed of the coastal environment, including during the transfer of materials from ship to shore or vice versa.	Dust sources associated with the MHP are unlikely to directly affect the coastal environment or to relate to this policy.

5.6.1 Regional Plan for Discharges to Land

Chapter 5: SOLID CONTAMINANTS

<p>OBJECTIVE 5.3. To ensure that the adverse effects from the discharge of solid contaminants into or onto land, on water and soil quality, social, cultural and amenity values, and human health are avoided, remedied or mitigated.</p>	<p>Potentially vegetation, including native logs to be buried on site require consideration against these provisions. The 'contaminant' will be natural materials that will decompose over time. Importantly the staging area will contain a number of temporary buildings, work areas and possibly a batching plant which will require removal at the end of the construction period and rehabilitation to occur. This planning is important that no solid waste remains at the end of this period, and conditions should be addressed to specifically address the potential effects that could occur in the absence of appropriate level of rehabilitation work.</p>
<p>POLICY 5.4.2 To ensure that solid waste disposal facilities are sited, designed, constructed and managed to avoid, remedy or mitigate any adverse effects on the environment.</p>	<p>The rehabilitation plans need to address any placement of logs or natural material (i.e. vegetation) within the staging area to be designed and located to avoid adverse effects such as land stability, erosion, slumping, effects on soil fertility for replanting plans.</p>

Chapter 6: LIQUID CONTAMINANTS

<p>OBJECTIVE 6.3.1 To ensure that the adverse effects from the discharge of liquid contaminants into or onto land, on water and soil quality, social, cultural and amenity values, and human health are avoided, remedied or mitigated.</p>	<p>This enabling provisions is supported by the nature of the proposal which is to manage and then rehabilitate areas subject to discharges of stormwater, contaminants associated with coffer dam sealing material and the discharge of treated sewage in the staging area, where receiving waterbodies, soil quality, social, cultural and amenity values are sustained. Meridian has its own health and safety legislative drivers to ensure human health considerations are maintained for their workforce.</p> <p>In terms of the coffer dam sealing material, the nature and rate of discharge of sediment, and water quality as a result, requires a specific discharge model and plume investigation to ensure that the downstream effects uphold the intent of Objective 6.3.1.</p>
<p>POLICY 6.4.1 To ensure that the discharge of liquid contaminants into or onto land is of a nature or at a rate that does not exceed the ability of the land to assimilate the contaminant, and does not result in soil contamination.</p>	<p>With the treatment pond having a capacity of retaining more than 75% of sediment in a 1 in 10 year rainfall event the expected effects are no more than minor, and an expectation of the dilution rate in the river from the discharge.</p>
<p>POLICY 6.4.2 To require monitoring of, and where necessary improvements to, disposal systems to ensure that the adverse environmental effects are avoided, remedied or mitigated.</p>	<p>The discharge permits sought will require monitoring as conditions of consent, or form part of the management plan regime.</p>
<p>POLICY 6.4.4 To avoid health hazards and cultural, ecological, and aesthetic degradation of the environment from the discharge to land of sewage from mobile sources</p>	<p>The final design of the treatment system will need to account for the ground conditions, particularly as it will be in close proximity to the Mokihinui River. This would be subject to detailed consideration at management plan stage, so that Policy 6.4.4 is met...</p>

Proposed Water Management Plan (June 2007 version)

Chapter 5: NATURAL AND HUMAN USE VALUES

<p>OBJECTIVE 5.3.1 To provide for the sustainable use and development of water resources.</p>	<p>The primary driver of Objective 5.3.1 is to enable continued use of water for a range of</p>
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	existing and new uses, in recognition that people and communities can provide for their economic, social and cultural well being. A balance of what is appropriate use and development is further governed through additional Objectives and Policies, but essentially requiring a balanced approach where water can be sustainably used and developed..
OBJECTIVE 5.3.2 To protect waterbodies from inappropriate use and development by maintaining and where appropriate enhancing their natural and amenity values including natural character and the life supporting capacity of aquatic ecosystems.	The balance between protection versus appropriate use and development places emphasis on natural and amenity values, including natural character and life supporting capacity of aquatic ecosystems. In more detail this is supported by Policies 5.4.1. The MHP will result in significant changes to natural and amenity values, natural character and the life supporting capacity of aquatic ecosystems. The changes are so significant that the resulting environment and values associated with the highly modified environment are difficult to compare. However, the following matters have been attempted to be protected within the MHP; <ul style="list-style-type: none"> • The residual flow, to sustain the water flow and aquatic life, • The amenity of areas surrounding the waterbody, that become more accessible (referred to in Policy 5.4.1 (d)) • The restoration plans and ongoing environmental improvement programmes.
OBJECTIVE 5.3.3 To maintain or where appropriate enhance the spiritual and cultural values and uses of significance to Poutini Ngäi Tahu.	The CIA explaining the consent of consistency with Policy 5.3.3. The PWMP includes Chapter 4 and the specific cultural values of the Mokihinui. The Ngati Waewae submission also comments on cultural values.
OBJECTIVE 5.3.4 To avoid the exacerbation of any natural hazard or the creation of a hazard associated with the West Coast's water bodies.	The function of the Mokihinui River in terms of the coast and the Mokihinui settlement is significant in terms of providing a river sediment load that is contributing to the replenishment of land against that of natural (coastal) erosion. The potential exacerbation of coastal and river erosion is recognised by the MHP and mitigation through adaptive management is proposed. The only issue with such a mitigation measure is the degree of responsibility possibly taken (or not taken) by Meridian and the Councils. The MHP raises some issues in terms of the objective.
POLICY 5.4.1 In the management of any activity involving water to give priority to avoiding, in preference to remedying or mitigating: (1) Adverse effects on: (a) Natural values of lakes and rivers identified in Schedule 1A; (b) Water supply values identified in Schedule 1B; (c) Spiritual and cultural values and uses of significance to Poutini Ngäi Tahu identified in Schedule 1C; (d) The natural character of wetlands, and lake and rivers and their margins; (e) Outstanding natural features and landscapes; (f) Significant indigenous vegetation and significant habitat of indigenous fauna assessed in accordance with Policy 9.2 of the West Coast Regional Policy Statement; (g) Existing public access to and along lakes and rivers; (h) Significant historic heritage. (2) Adverse effects which cause or exacerbating flooding, erosion, land instability, sedimentation or property damage.	The Mokihinui River is not stated in a, b, or c explicitly within the Water Management Plan. The preferences expected under Policy 5.4.1 are accounted for in the MHP according to the application, as the Mokihinui as the effects on shortjaw kokopu, blue duck, or longfin eel can be mitigated by the management plans and replacement habitat values achieved elsewhere as a matter of offsetting potential effects. This is not in accordance with the policy to "avoid", in preference to mitigation. The interpretation of this policy under (d), (e), (f) and (h) rely on expert opinion and case law. However, it is considered that the river, gorge and surrounding area which would be affected by the MHP have important values under these headings, and therefore the priority is to avoid effects on these values. Matters (d) and (e) are addressed in the application by substitution of a lake for a wild river in the gorge, which may not be in accordance with policy.

<p>(3) Adverse effects on existing lawful uses</p>	<p>Management of indigenous vegetation and habitat is anticipated by the MHP by accepting the loss of the inundated area, and restoration, enhancement of surrounding indigenous vegetation. As outlined in evaluating Policy 9.2 of the RPS the absence of specific protective statutory frameworks in the district plan means that expert opinion provides the main guide.</p> <p>The MHP proposes to manage access working with DoC and stakeholders and interested parties to achieve public access in a controlled manner. The exact management is to come from the proposed CMS, but control of access is required for health and safety reasons for up to five years. The MHP is contrary to Policy 5.4.1 (g) if the longer term benefits of the proposed walking track are not taken into account. However, if one considers the role of mitigation the management proposal could satisfy Policy 5.4.1(g).</p> <p>The management of significant historic heritage is accounted for in the MHP by registering heritage and artefacts and where appropriate relocating items to form part of the visitor experience. This approach may be consistent with the approach of Policy 5.4.1(h).</p> <p>The MHP can not avoid flooding (lake) and land instability simply because of the nature of the MHP. The project has raised matters relating to risk of flooding, will cause erosion, and there is a high probability of lake shore instability. While the remedying and mitigation is probably sufficient to ensure adverse effects are no more than minor there are questions around whether the water activities associated with the MHP are consistent with Policy 5.4.1 (2).</p> <p>The adverse effects on lawfully established activities are minor because of the status of consents associated with the Mokihinui River, thereby being consistent with Policy 5.4.1(3).</p>
<p>POLICY 5.4.1B To take into account the benefits from the use and development of renewable energy, including the social and economic benefits.</p>	<p>The application of the MHP has outlined in detail the benefits of the scheme and specifically renewable energy in this location. Taking this into account is a key consideration in terms of the balance between environmental effects and the benefits. The MHP would be consistent with Policy 5.4.1B.</p>
<p>POLICY 5.4.1C In the management of any activity involving water, to avoid, remedy, or mitigate adverse effects on:</p> <ul style="list-style-type: none"> (a) water quality; (b) amenity values; (c) indigenous biological diversity; (d) intrinsic values of ecosystems; (e) the natural character of wetlands, and lakes and rivers and their margins, not described in 5.4.1(1)(d) (f) historic heritage not described in 5.4.1(1)(h). 	<p>Points (a) to (h) have been taken into account either through identification of specific mitigation or offset measures (conditions of consent) and expectation of what is to be included in the management plans.</p>

<p>POLICY 5.4.4 To recognise and provide for the following features of water bodies when considering adverse effects on their natural character:</p> <ul style="list-style-type: none"> (a) The topography, including the setting and bed form; (b) The natural flow characteristics; © The natural water level and its fluctuation; (d) The natural water colour and clarity; (e) The ecology; and (f) The extent of use or development within the catchment, including the extent to which that use and development has influenced (a) to (e). 	<p>Given the Mokihinui River is unmodified by human induced activity the natural character is subject to significant effects from the MHP.</p> <p>The greatest effect of the MHP, and inconsistency with Policy 5.4.4 is on the (b) flow characteristics, the (c) water level and fluctuations and potentially (e) ecology (river to lake). However, the natural character of the setting and bed form will also be significantly modified.</p>
<p>POLICY 5.4.5 To have particular regard to the following qualities or characteristics of water bodies when considering adverse effects on amenity values:</p> <ul style="list-style-type: none"> (a) Aesthetic values associated with the water body; (b) Recreational opportunities provided by the water body; © Sports fish habitats, as outlined in Appendix 20.2; and (d) The extent of use or development within the catchment, including the extent to which that use and development has influenced (a) to (c). 	<p>The aesthetic values and recreational opportunities have been considered and the qualities and characteristics of the water body contributing to amenity values will be affected significantly. Changes to aesthetics and recreational opportunity are inevitable if the river is dammed creating a large scale lake. Peoples' appreciation of this environment will be altered, although it will cater for differing view points and recreational pursuits.</p> <p>The Mokihinui is listed in Appendix 20.2 as "Sportsfish Habitats" aimed at the catchment that supports the Region's more significant sports fisheries.</p>

Chapter 6: SURFACE WATER QUANTITY

<p>OBJECTIVE 6.3.1 To retain flows in water bodies sufficient to maintain their instream values, natural character, and life supporting capacity.</p>	<p>Downstream of the dam, a minimum flow of less than 16 cumecs (the MALF) is, with reference to technical experts, suitable to maintain in-stream values, natural character, and life supporting capacity which would be consistent with Objective 6.3.1. However, the change of 14km from a river to a lake results in a major change in in-stream values and natural character, and this, together with the dam, may significantly alter (and potentially adversely affect) the river's life supporting capacity.</p>
<p>OBJECTIVE 6.3.2 To provide for the water needs of the West Coast's industries, network utility operators and community water supplies.</p>	<p>The MHP is consistent with Objective 6.3.2 given the Mokihinui settlement water supply is separately secured from Mokihinui River. Furthermore the water needs which would serve generation capability is generally compatible with industry needs and network utility operations.</p>
<p>OBJECTIVE 6.3.3 To promote the efficient use of water.</p>	<p>Objective 6.3.3 is intended to maximise access to water resources and minimise wastage. The MHP is not contrary to Objective 6.3.3 as it does not compromise water access or cause wastage of water.</p>
<p>OBJECTIVE 6.3.5 To avoid, remedy or mitigate any adverse effects of managed flows in rivers.</p>	<p>By way of the design and flow regime, the MHP attempts at a relatively simplistic level to avoid adverse effects in managing the flows, thereby being consistent with Objective 6.3.5. This Objective is to address adverse effects of flows or variable flows that provide for natural</p>

	and human use values, existing lawful uses or bank and bed stability. Below the head of the lake the effect of changes to the flow on natural and human use values (Policy 6.4.3) and bank and bed stability can not be conclusively said to be avoided, remedied or mitigated until the performance of the management plans is demonstrated..
POLICY 6.4.1 Takes from rivers where the total volume of water allocated is less than 20% of the river's mean annual low flow will require no minimum flow.	The MHP is a non consumptive take, in that the water is stored and a residual flow is maintained past the dam at all times
POLICY 6.4.2 Where Policy 6.4.1 does not apply, a minimum flow based on 75% of the mean annual low flow will be applied as a consent condition.	Policy 6.4.1 does not apply, making 6.4.2 a requirement as a condition of consent, however in this case the MHP proposes 100% of the MALF – ie, Meridian has promoted a flow of no less than 16 cumecs (the MALF) which is the basis for maintaining the aquatic ecology and habitat. On this basis, this exceeds the standard expected of Policy 6.4.2. However, in the event that the catchment to the reservoir is providing less than 16 cumecs then the discharge from the dam will match that being received. This is a dynamic arrangement which replicates the low flows and attenuates the high flows.
POLICY 6.4.3 To consider granting an application for a resource consent to take water from a river, subject to a minimum flow lower than that specified in Policy 6.4.2, on a case-by-case basis, provided: a) Any adverse effect on instream values or natural character of the source water body or any other connected water body are avoided, remedied or mitigated; and b) Any adverse effects on any lawfully existing takes of water are no more than minor; c) The application if granted, together with the cumulative effect of other existing consents, avoids, remedies or mitigates adverse effects on the life supporting capacity of any waterbody.	This is not applicable as Meridian has proposed the MALF as a minimum flow as a condition of consent
POLICY 6.4.5 To suspend the taking of water when minimum flows have been reached.	The taking of water for hydro generation will not be suspended when flows at the head of the lake are less than 16 cumecs because the dam storage enables the continued activity, however if the lake storage is reduced to zero (i.e. at or below RL 97) the discharge will be operated so that discharge to the river below the dam matches inflows to the lake as closely as possible until a flow of 16 cumecs or greater is reinstated. On this basis the “taking” of water would not be suspended because inflows remain into the “dam”. While this is not anticipated as an issue technically it would contravene Policy 6.4.5.
POLICY 6.4.6 To promote the efficient use of water and to consider the need to cap the overall allocation from any water body.	Policy 6.4.6 is not relevant given the taking of water does not altogether compromise other potential uses from seeking consents for future takes. If the consents are granted, Meridian would become an affected party to the consent. If any cap was necessary the WCRC would ultimately have to assess and consent such activities.
POLICY 6.4.7 To monitor the taking and use of water, including requiring the volume and rate of take to be measured as or where appropriate.	The MHP will require water monitoring of the inflow, discharge (below the dam) and of lake levels as part of the monitoring regime anticipated. This would be consistent with Policy 6.4.7.

6.5 POLICIES FOR LAKE LEVELS, DAMMING, DIVERSION AND AUGMENTATION

POLICY 6.5.1 Where lake levels are already controlled, to recognise and provide for the purpose of	Policy 6.5.1 is not relevant because there is no existing lake.
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that control if limits are to be placed on operating levels.	
<p>POLICY 6.5.2 To limit the operating levels of any controlled lake, where appropriate, to avoid or mitigate adverse effects on:</p> <p>(a) The matters referred to in Policy 5.4.1, 5.4.1B and 5.4.1C;</p> <p>(b) Riparian values;</p> <p>(c) Lakeshores and public access;</p> <p>(d) Bed stability; and</p> <p>(e) The needs of the West Coast's people and communities.</p>	<p>The MHP proposes to control lake levels around a 3 metre level to ensure mitigation of the effects listed in Policy 6.5.4 and those associated policies. By the appropriate level of lake level control, the MHP demonstrates consistency with Policy 6.5.2.</p>
<p>POLICY 6.5.3 In regulating the management of controlled flows, other than in association with a small dam or any dam designed to contain contaminants, to have regard to:</p> <p>a) The matters identified in Policy 5.4.1 5.4.1B and 5.4.1C;</p> <p>b) The periodic release of water at appropriate flow rates, where necessary to remove excess algal growth or accumulated sediment; and</p> <p>c) The existing needs of consumptive users of water,</p> <p>d) The extent to which the water body has been modified by resource use and development.</p>	<p>Managing the flows through control of the generation, outlets and spilling and the associated regime outlined in the application attempts to address the matters in Policy 5.4.1, 5.4.1B and 5.4.1C. The earlier analysis of these policies however raises issues in terms of a number of relevant considerations, which would also apply to this policy. The issues are more fundamental however than just the management of flows from the dam, which this policy addresses.</p> <p>In terms of the periods of released flows, the MHP simulates natural river inflows, requiring monitoring of the significant inflow streams. This is particularly important during the during the whitebait season to meet Policy 6.5.4</p>
<p>POLICY 6.5.4 To require, where necessary, desirable and practicable, provision for fish migration.</p>	<p>The MHP dam will deter fish migration. While the applicant has adopted fish passage mitigation measures, and a management plan including simulating inflows and discharge rates, trap and transfer system and monitoring of trout populations to determine whether there are effects from MHP before mitigation is implemented. However, there are high levels of uncertainty in terms of the baseline information and the effective performance of the mitigation proposed.</p> <p>Clearly the need for fish migration is necessary, yet the certainty of performance will not be known until the details are better known through monitoring and management plans certified and updated as a result of ongoing monitoring.</p>
<p>POLICY 6.5.6 When considering diversions associated with disturbance of riverbeds, priority will be given to avoiding, in preference to remedying or mitigating, adverse effects on surface flows.</p>	<p>Construction diversion effects can not be avoided due to the method of achieving roller compacted concrete in this environment. However, when the scheme is operating the dam will not necessarily be deemed a "diversion", as it is along a similar alignment to the existing river. The Cedar Creek diversion is to accommodate structures. Generally, all other diversions are related to construction works, and are thus generally consistent with Policy 6.5.6.</p>
<p>POLICY 6.5.7 Financial contributions, works or services may be required to offset, remedy or mitigate any unavoidable adverse effect of the taking, damming or diversion of water.</p>	<p>The MHP has not offered any financial contributions to offset the adverse effects, however policy 6.5.7 is supported by Chapter 15 of the PWMP, to justify why financial contributions could be taken. Some of the suggested conditions involve an element of this policy (ie, involving land, works or money as part of mitigation).</p>

Chapter 7: SURFACE WATER QUALITY

<p>OBJECTIVE 7.3.1 To maintain or enhance the quality of West Coast's water</p>	<p>Water quality of the Mokihinui River and affected tributaries are likely to be affected during construction and after, particularly within the mixing zone and what constitutes "reasonable mixing" and the level of treatment (wastewater), settlement and discharge controls and ability of the river aquatic ecology and habitat to withstand the discharge of contaminants. The mixing zone location has good dilution in the reach with cross turbulence and volumes which may provide reasonable mixing, however the application has not provided any information as to how the conclusions were reached.</p> <p>However, the nature of the lake will result in a significant change in the water quality as described by Mr Cameron.</p>
<p>POLICIY 7.4.1 The West Coast regional Council will manage the swimming areas identified in Schedule 4 for contact recreation purposes (Class CR) and all other surface water bodies in the region of aquatic ecosystem purpose (Class AE).</p>	<p>Mokihinui river is not covered in Schedule 4 and th applicant has committed to meeting Class AE water quality classification.</p>
<p>POLICIY 7.4.1 When considering applications for resource consents to discharge contaminants to water to have regard to:</p> <ul style="list-style-type: none"> (a) The nature of the discharge and the sensitivity of the receiving environment to adverse effects; (b) The Financial implications, and the effects on the environment of the proposed method of discharge when compared with other options; (c) The current environmental mitigation technology and the likelihood that the proposed method can be successfully applied; and (d) The cumulative effects of discharges of contaminants and the assimilative capacity of the water body and actual or potential effects in the coastal marine area. 	<p>The discharges to the Mokihinui are small in comparison to the anticipated flows in the river downstream of the dam (16 cumecs MALF), and in our opinion the dilution will be sufficient given the sensitivity of the river ecology, however the area of mixing is of concern and has the potential to be limited as a condition of consent.</p> <p>Because the Mokihinui River is a source of employment for the whitebait season a tangible dollar value can be considered as financial implications should the water quality affect whitebait activities</p> <p>The level of treatment from the settlement ponds is uncertain however Section 6.2 of the Construction Report outlines the proposed settlement construction plans, volumes and expected discharges from the water blasting activities, the stormwater runoff (staging area) and the concrete batching plant discharges. The proposal recognises a high level of treatment (settlement) of sediment, metals and hydrocarbons which retains more than 75% of sediment in stormwater runoff from the 10 % AEP event, and obviously more in smaller events. The certainty of that treatment will require monitoring both prior to discharge to the river and after "reasonable mixing" to determine the likelihood of adverse effects on the water quality and associated aquatic ecology.</p>
<p>POLICY 7.4.6 Mixing zones will be required for the discharge of contaminants to water. These will be limited to the extent necessary to take account of:</p> <ul style="list-style-type: none"> (a) Water quality classes; (b) The size and sensitivity of the receiving environment; (c) The matters identified in Policy 5.4.1; 	<p>Qualification of the mixing zones, in terms of plume size are not described in the application, other than in the application AEE (Section 6.4.4.3), the Statutory Assessment (Sections 4.1.3 and 8.1.3) and the Construction Report (Section 6.5). In those sections the applicant concludes that effects will be minor after reasonable mixing provided by the Mokihinui River. The aquatic environment and water quality is of a high quality and until the extent of plume</p>

<p>(d) The physical processes acting on the area of discharge; and (e) The particular discharge, including contaminant type, concentration, and volume</p>	<p>and mixing zone is determined it would be precautionary to determine that the discharges from the dewatering activity, the coffer dam, waterway diversions and discharges from the settlement ponds are likely to resulting more than minor environmental effects on the receiving Mokihinui River.</p>
<p>POLICY 7.4.7 The duration of any new resource consent for an existing discharge of contaminants will take account of the water quality class after reasonable mixing, and any anticipated adverse effects of the discharge on an affected water body, and: (a) Will be up to 35 years where the discharge will meet the water quality class for the duration of the resource consent; (b) Will be no more than 15 years where the discharge does not meet the water quality class but will progressively meet that standard within the duration of the resource consent; (c) Will be no more than 5 years where the discharge does not meet the water quality class; and (d) No resource consent, subsequent to one issued under ©, will be issued if the discharge still does not meet the water quality class.</p>	<p>The three year construction period and discharges during this time anticipate that Class AE Water (water managed for aquatic ecosystem purposes) as a quality standard will be met after reasonable mixing, as outlined in the application. If this is able to be achieved, through a condition of consent, the proposal would be considered consistent with Policy 7.4.7.</p> <p><i>Class AE Water (being water managed for aquatic ecosystem purposes)</i> (1) <i>The natural temperature of the water shall not be changed by more than 3° Celcius.</i> (2) <i>The following shall not be allowed if they have an adverse effect on aquatic life:</i> (a) <i>Any pH change;</i> (b) <i>Any increase in the deposition of matter on the bed of the water body or coastal water;</i> © <i>Any discharge of a contaminant into the water.</i> (3) <i>The concentration of dissolved oxygen shall exceed 80% of saturation concentration</i> (4) <i>There shall be no undesirable biological growths as a result of any discharge of a contaminant into the water.</i></p>
<p>POLICY 7.4.8 With respect to discharges from any new stormwater reticulation system, or any extension to an existing stormwater reticulation system, to require: (a) The separation of sewage and stormwater; (b) The prevention of contamination by industrial or trade waste; and (c) The use of techniques to trap debris, sediments and nutrients present in runoff.</p>	<p>The proposal is not a “reticulated system” which is focused on “urbanised” areas. Therefore Policy 7.4.8 is not applicable.</p>
<p>POLICY 7.4.9 To promote and enable the progressive upgrading of the quality of water discharged from existing stormwater reticulation systems where appropriate.</p>	<p>It is likely this Policy was developed similar to Policy 7.4.8 for “reticulated system” which is focused on “urbanised” areas, however if applied to MHP the settlement ponds will be provided for the construction duration. These will need rehabilitation techniques applied when restoring the staging area and associated discharges over time will improve the water quality, thereby being consistent with Policy 7.4.9.</p>

Chapter 9: GROUNDWATER

<p>OBJECTIVE 9.3.1 To sustain existing uses of the West Coast’s groundwater, by protecting water quantity and quality and avoiding depleting surface water flows.</p>	<p>The primary discharge to ground is from the package treatment plant and field disposal to serve the wastewater needs of the construction staff. This is designed for 26m³/day which results in only a small volume of treated discharge. The proposal would be consistent with Objective 9.3.1.</p>
<p>OBJECTIVE 9.3.2 To minimise conflict between competing uses of groundwater.</p>	<p>Groundwater abstraction in the area affected by the MHP is negligible, and the proposal does not contravene Objective 9.3.1.</p>

OBJECTIVE 9.3.3 To avoid, remedy or mitigate adverse effects on surface water bodies associated with groundwater takes.	No groundwater takes are applied for as the takes are from surface water bodies. Objective 9.3.3 is not relevant.
POLICY 9.4.1 In managing any activity involving the taking of groundwater to ensure that adverse effects are avoided, remedied or mitigated.	Policies 9.4.1 to 9.4.6 are not relevant as MHP does not involve the abstraction of groundwater. The water takes from the Mokihinui River (surface water) could have an effect on the recharging the groundwater aquifer of the river flats around Seddonville, however such small quantifies of take in comparison to other contributing water to the aquifer is likely to be negligible.
POLICY 9.4.2 In managing the taking of water from any groundwater aquifer, priority will be given to the avoidance of: 1. The total take from all bores exceeding the annual renewable yield of the aquifer; and 2. Depletion of any surface water resource.	
POLICY 9.4.3 In managing the taking of groundwater: (a) To have regard to avoiding adverse effects on existing groundwater takes, unless the approval of affected persons has been obtained; and (b) To give priority to avoiding adverse effects on community water takes listed in Schedule 3.	
POLICY 9.4.4 To ensure that the quantity of water granted, under a resource consent for the taking of water, is no more than that required for the intended use of that water having regard to the local conditions.	
POLICY 9.4.6 In granting resource consents to take water from any aquifer, to require the volume and rate of take to be accurately measured and groundwater quality to be monitored as or where appropriate.	

Proposed Regional Land and Riverbed Management Plan (June 2007 version)

Chapter 4: LAND MANAGEMENT

OBJECTIVE 4.3.1 To avoid or reduce adverse effects from land disturbance so that the region's water and soil resources are sustainably managed.	The key land disturbance activities affected by the MHP are the vegetation removal activities associated with the lake development. Land stability effects have been addressed in the application, in terms of lake filling (Section 3.4.2.3), downstream bank stability (Section 6.2.2) and the necessary lake, river and air monitoring and associated adaptive measures. Concerns have been raised as to consequent lake shore stability. Of question is the circumstances when adaptive management practises are applied and how they are applied, because the application only commits to when "a material adverse effect on in-stream sediment process and/or the stability of the river bank" is monitored and "that management responses be formulated to rectify problems and mitigate such effects appropriately". There are no measurable performance expectations, but rather a reactionary response, which is contrary to the avoid, or reduce adverse effects expected under Objective 4.3.1.
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<p>POLICY 4.4.1 To manage the disturbance of land in order to avoid remedy or mitigate any adverse effects on:</p> <ul style="list-style-type: none"> (a) The stability of land (eg. slumping, subsidence, or erosion), river banks, and riverbeds; (b) Water quality, including clarity, turbidity, and temperature changes, and instream values; © Changes in water level including water table; (d) Public access to rivers, lakes, and their margins; (e) Natural character, cultural, recreational, and ecosystem values; (f) Soil depth and soil fertility; (g) The integrity of property or structures. 	<p>Managing land stability requires performance expectations to ensure the source of sediment does not adversely affect other potentially unstable areas or degrade water quality.</p> <p>Through physical lake level fluctuations, and also in saturating soils (gorge slopes) that previously have been subject to little saturation, the MHP has the potential to accelerate land instability and sediment release. Monitoring of these potential effects without tangible management mechanisms would be contrary to Policy 4.4.1.</p>
<p>POLICY 4.4.2 To manage earthworks (for example, mining) to avoid effects on the environment where the activity may produce any of the following geochemical processes, above background levels:</p> <ul style="list-style-type: none"> (a) Release of acid rock drainage (b) Precipitation of Iron Oxides © Release of Heavy Metals 	<p>It is unlikely that the MHP would result in such processes.</p>
<p>POLICY 4.4.3 To manage the disturbance of riparian margins to:</p> <ul style="list-style-type: none"> (a) Maintain or enhance water quality (including clarity, turbidity, and temperature), and instream values, (including aquatic ecosystems). (b) Promote soil conservation © Ensure that existing public access to water bodies is maintained or enhanced. (d) Protect the natural character of the coastal environment, wetlands, and lakes and rivers and their margins, from inappropriate use and development. 	<p>MHP proposes to monitor the riparian margins of the river downstream of the dam and adapt appropriate management. In terms of water quality and in-stream values, these too will be subject to discharge quality monitoring and monitoring of aquatic ecology. However, the natural character values of the river will not be protected, and the lake shore may take many years to establish a character that appears natural.</p> <p>In terms of public access, the MHP will restrict access during construction, but promotes improved long-term access to and along the lake above the dam.</p> <p>In our opinion “active management” opposed to “passive management”(non committal) could be determined through conditions of consent to uphold the integrity of Policy 4.4.3.</p>
<p>POLICY 4.4.9 To promote land management being undertaken in accordance with industry best practice, so that leaching of faecal material and nutrients, and loss of sediment to water is avoided, remedied or mitigated.</p>	<p>The main thrust of Policy 4.4.9 is the promotion of land practises in clearing land limiting sediment discharging into waterways, and the WWTP providing a suitable level of treatment. In our opinion the latter of these matters is acceptable, but the former will require careful management of each of the areas that is subject to clearing and undertaking earthworks.</p>
<p>POLICY 4.4.10 To encourage the retention, maintenance or planting of appropriate riparian vegetation</p>	<p>Restoration and planting plans are outlined in the Construction Assessment Report (Section 8.3) which includes native plantings, density, pest and weed control to achieve success which will be consistent with the intent of Policy 4.4.10.</p>

Chapter 5: LAKE & RIVER BED MANAGEMENT

<p>OBJECTIVE 5.3.1 To avoid, remedy or mitigate the adverse effects of lake and riverbed activities on:</p> <ul style="list-style-type: none"> (a) The stability of beds, banks and structures; 	<p>The MHP by way of its very design and area of inundation of the river developing a lake requires significant remedying and mitigation of effects on the environment. By focusing on remedying and mitigating effects through adaptive management plans the MHP endeavours</p>
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<ul style="list-style-type: none"> (b) The flood carrying capacity of rivers; © The natural character of wetlands, lakes and lakes and their margins; (d) Indigenous biodiversity and ecological values, including fish passage; (d) Amenity, heritage and cultural values; (e) Sports fish habitat values; (f) Water quality; (g) Navigation. 	<p>to be consistent with Objective 5.3.1. However, there is a lack of detail on how those environments can be provided for and managed.</p>
<p>POLICY 5.4.1 To provide for appropriate use and development in lakes and rivers and recognise the benefit to the community of maintaining existing structures and infrastructure.</p>	<p>The large scale hydro of the MHP scale was probably not envisaged as being an appropriate use. The explanation to this policy outlines transport links (i.e. bridges) and network utility infrastructure (i.e. pipes, cables etc). However, the interpretation of Policy 5.4.1 should not exclude the MHP if the benefits illustrate a strong contribution to the community.</p>
<p>POLICY 5.4.2 To manage bed disturbance, reclamation, deposition and the use, erection, extension, reconstruction, maintenance, alteration, demolition, or removal of structures in, on, under, or over the bed of any lake or river, so that the activity does not cause or contribute to significant adverse effects on:</p> <ul style="list-style-type: none"> (a) The stability of beds and banks; (b) The capacity of rivers to carry flood flow; © Heritage, amenity or cultural values; (d) water quality; (e) existing structures or existing uses; (f) navigational safety; (g) the natural character of the coastal environment, wetlands, rivers and lakes and their margins; (h) significant indigenous vegetation and significant habitats of indigenous fauna. 	<p>The construction management plans and interlinked aquatic ecology, terrestrial ecology, and erosion monitoring Management Plans will be attempting to manage or mitigate the effects of the dam, including starvation of sediment and other matters in points (a) to (f). Items (g) and (h) cannot be satisfactorily addressed.</p> <p>Adaptive management plans for a scheme of this scale and construction duration are uncertain in terms of how effective this management will be. The approach however does attempt to address the matter of management, and is thus potentially consistent with the management approach anticipated by Policy 5.4.2</p>
<p>POLICY 5.4.4 In addition to the requirements of Policy 5.4.2, when considering an application to excavate gravel from a river or lake bed, to consider:</p> <ul style="list-style-type: none"> (a) The sustainable yield of the lake or river system; (b) Adverse effects on bed levels and channel location; © Potential spread of pest plants. 	<p>Gravel extraction will occur in conjunction with the dam construction, but should not affect the bed levels or channel, thereby being consistent with Policy 5.4.4.</p>

BULLER DISTRICT PLAN

CHAPTER 4 – OBJECTIVES AND POLICIES

INFRASTRUCTURE

<p>Objective 4.2.5.1. To provide for the efficient development, operation and maintenance of infrastructure throughout the District, while avoiding, remedying or mitigating adverse effects.</p>	<p>The proposal is multi faceted. Although it relates to electricity generation and transmission, it also impacts on all infrastructure.</p> <p>Electricity generation: The proposed structure would be able to generate between 65 and 85 Megawatts of electricity which would be able to supply approximately 35,000 to 45,000 houses. This would provide an increased electricity supply for the West Coast. The proposal is therefore consistent with Objective 4.2.5.1, providing efficiency can be demonstrated.</p> <p>Substations: The proposed substation and powerlines are expected to provide for the efficient distribution of electricity as required under Objective 4.2.5.1. The second substation is located so as to allow connection into the existing Inangahua to Westport B line.</p> <p>Telecommunications: Two new telecommunication towers will result in a greater coverage available from the main network. The proposal will therefore result in meeting the Objective.</p> <p>Roading: Upgrades are proposed to improve the Mokihinui Road. This includes the replacement of one way bridges with two way and the widening of the road to improve sight lines and capacity.</p> <p>Public Access: The proposal ensures continued access to the backcountry through the project and provides an alternative access after completion thus meeting with the objectives.</p> <p>Water/Effluent: The applicant is providing stand alone systems which will meet with the objective by being designed to accommodate the requirements of the MHP.</p> <p>Stormwater: The system designed is not large enough to cater for all the stormwater requirements if the culvert dewatering is included. Otherwise the system and discharge will meet the objective. Its efficiency is therefore questioned.</p> <p>Waste Disposal: The Applicant will generate waste as part of the proposal, both in the form of domestic and industrial waste, as well as vegetative waste. Disposal of waste has not been addressed in the application, except in terms of possible burying of vegetation. It is uncertain whether this will meet the objective.</p>
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<p>Objective 4.2.5.2. To protect infrastructure resources from the adverse effects of activities located adjacent to, or in association with, the facility.</p>	<p>The proposal will result in securing electricity supply to the West Coast, currently subject to transmission losses through a vulnerable line.</p> <p>Electricity generation: A log boom, and restricting access close to the dam structure is proposed to ensure that the generating facilities are protected. Security fencing is proposed to protect the structures.</p> <p>Substations: The location of the two substations within close proximity to existing roads, ensures ease for protecting/maintaining the substations.</p> <p>Power lines: There is uncertainty about the effects of protecting the powerline from vegetative growth under conductors and ease of gaining access along the transmission route for on-going maintenance. Therefore, there is insufficient information to evaluate this objective in relation to the lines.</p> <p>Roading: Part of the road upgrade will widen the road through Seddonville. A number of houses are located closer to their front boundary with Mokihinui Road than is permitted under the District Plan. It is not known whether the widening will bring the road closer to these houses. Most traffic will be limited to day time hours to avoid adverse effects of noise at night, however oversized vehicles will be directed to operate in the early morning so as to avoid any disruption to other road users.</p>
<p>Policy 4.2.6.1. Development in areas which, due to physical characteristics, are difficult to service shall be permitted where appropriate technical solutions are provided to avoid, remedy or mitigate against adverse effects.</p>	<p>Water Supply: It is proposed to install a water supply at the site. The water is to be extracted from the Mokihinui River for storage above the staging area. There is no reticulation in the area, therefore extracting water and storing it on site, at elevation, will provide an effective water supply. The water supply to be used for domestic purposes will be required to be potable.</p> <p>Effluent Disposal: There is no sewerage reticulation within Seddonville, therefore the application must be self sufficient. The Applicant is proposing to install a package treatment system within the staging area that will be designed to accommodate the construction stage, and another system at Cedar Creek. This is considered to be an effective method of managing effluent.</p> <p>Stormwater: The Applicant is providing a stormwater system at the staging area which will include a treatment facility. Other activities such as diversion channels are proposed to take water away from operating sites. This is also proposed at the substation at Cedar Creek. This is considered to be an effective method of dealing with stormwater, however the staging area system may require enlarging if the water from the culvert is to be pumped to the system.</p>
<p>Policy 4.2.6.2. To ensure that services are provided in a manner which does not have adverse</p>	<p>Electricity generation: The proposal will provide an increased electricity supply for the West</p>

<p>effects on the environment, and which enables communities to provide for their health and safety.</p>	<p>Coast. The dam will require designing to cater for earthquake hazards. This is a high level of risk however with low probability, and has a high potential social impact.</p> <p>Transmission of electricity is to be located so as to have minimal impact on the road network and terrestrial ecology while connecting into the main transmission. The line is to be set apart from existing buildings.</p> <p>Telecommunications: The two towers will improve capacity for both Seddonville and Stockton, as well as the proposal, thus meeting this policy.</p>
<p>Policy 4.2.6.3. To utilise a roading hierarchy which enables the effects of activities on the roading resource to be avoided, remedied or mitigated depending on the status of the road in the hierarchy.</p>	<p>The proposal will upgrade the existing road from SH67 to Seddonville, improving the intersection and widening parts of the road which are currently one way.</p> <p>The road is to be upgraded and widened through Seddonville to reduce the potential effects of noise and vibration on the residents of Seddonville.</p> <p>Currently the road beyond Burkes Creek is not maintained by the BDC. The proposal will upgrade this road, and provide access to the lake edge. The applicant will maintain this road. A public car park will be created at the boat ramp and start of the walking track.</p>
<p>Policy 4.2.6.4. The importance of Westport Airport, the Port of Westport and the railway network as communications links shall be recognised by ensuring the safe and efficient operation of these resources is not jeopardised by the effects of surrounding land use activities.</p>	<p>The application does not mention any effect on the airport, port or rail networks. It may be possible that some parts of the project will utilise these facilities, such as material arriving via ship. However this has not been identified in the application.</p>

THE BUILT ENVIRONMENT

<p>Objective 4.3.6.1. To recognise, and where possible, protect the distinctive character and heritage values of Buller settlements from the adverse effects of inappropriate development.</p>	<p>While the dam is located in the Rural Zone, there are associated effects of the dam which will impact on the built resource, such as transportation and housing of workers, Seddonville is a residential zone. Although an old mining town, no buildings are registered as being historic. The proposal will require transportation of both materials and workers through the township. This is being directed along Mokihinui Road, so as to reduce the impact on the township.</p>
<p>Policy 4.3.7.1. The main street commercial centres shall be defined in order to ensure a readily discernible community focal point and commercial heart to the main towns of the District.</p>	<p>The District Plan recognises only Westport and Reefton as having main street commercial centres, as defined in the Plan. Seddonville does not have a commercial centre, however its discernible community focal point would be the pub, which is also the shop, information centre and postal agency.</p> <p>The application may result in workers accommodation being created in Seddonville and Mokihinui. It is possible that these facilities could be used by the Domain Boards for tourist accommodation once construction is completed.</p>

<p>Policy 4.3.7.6. All land and building shall be maintained so as to preserve the amenities of the environment in which they are situated.</p>	<p>The Council's rules require buildings to be setback from front boundaries. A number of sites within Seddonville do not comply with the setback rules, however the proposal will not exacerbate this. The final location of the road widening may however bring the road closer to the buildings.</p>
<p>Objective 4.3.17.1 To ensure that further settlement growth takes place in a manner and location which does not have significant adverse environmental effects.</p>	<p>Although it is not part of the application, housing of workers will be required. It is possible that workers could be housed in the smaller communities close to the development, as outlined in the SIA. This accommodation is likely to be temporary in nature, however could be retained in consultation with the communities to provide tourist accommodation for the longer term.</p>
<p>Policy 4.3.18.3. To ensure that rural-residential development is either adequately serviced or capable of meeting its own requirements.</p>	<p>If workers accommodation were to occur within the communities around the development, they would be required to be self sufficient in terms of services, as there is no Council reticulated water or sewer schemes, except in Westport.</p>
<p>Objective 4.3.27.1 To facilitate the "intermingling" of land use activities within the District's settlements and towns to the extent that this is compatible with protection of amenity values and the sustainability of existing natural and physical resources in urban areas.</p>	<p>The proposal will separate the development works from the residential activities ensuring compliance with this objective. The separation distance is approximately 3km.</p> <p>It could be possible to locate works accommodation within camping grounds, providing an alternative tourist accommodation facility post construction.</p>
<p>Policy 4.3.28.2. The adverse effects of industrial and commercial operations, including noise, traffic, glare, shading, vibration, odour, effluent and waste emissions shall be minimised.</p>	<p>Due to the separation distance, the industrial effects will be limited, however such effects may still be experienced, particularly from construction activities.</p> <p>Mitigation measures for noise, particularly at night are proposed.</p> <p>The application site will be lit for 24hour operation, although vegetation between the site and the township will provide a buffer.</p> <p>Blasting is proposed to occur within a set time per day.</p> <p>Traffic will be the main effect on the communities. The frequency of movements, the timing of movements and the type of vehicle used will impact on the communities. While these cannot be avoided during construction, the effects can be minimised. Traffic will be limited to 7am - 10pm to avoid adverse effects of noise at night.</p> <p>Traffic may cause vibration to buildings adjacent to the road.</p>
<p>Policy 4.3.28.3. Industries with the potential for significant adverse effects shall be segregated from sensitive activities, for example, residential uses, health and educational institutes.</p>	<p>The proposal will separate the development works from residential activities ensuring compliance with this objective. The separation distance is approximately 3km.</p>

	The transmission line is to be located within road reserve from the power station to Coal Creek, and will then go through Charming Creek to Cedar Creek. The New Zealand Electrical Code of Practice for Electrical Safe Distances provides safe distances for any new buildings being erected once the line is in place
Policy 4.3.28.5. A diversity of residential living opportunities shall be provided for in residential activity areas.	<p>The applicant considers there to be enough housing within the communities already, however will provide workers accommodation if needed.</p> <p>If workers accommodation were to occur within the communities around the development, they would be required to be self sufficient in terms of services, as there is no Council reticulated water or sewer schemes, except in Westport. In addition, they may be able to be transferred to the community in the longer term for future tourist accommodation.</p>

RURAL LAND AND WATER RESOURCE

Objective 4.4.4.1 To ensure that the overall integrity and character of the rural environment and productivity of rural land resources is protected while enabling rural communities to provide for their social, economic and cultural wellbeing.	<p>The proposal will alter the character of the area within the gorge itself from wild free flowing river to a lake. It will have some effect on rural character downstream of the dam area. It will have limited impact on the area beyond the Forks.</p> <p>The proposal will not alter productivity of rural land resources as the dam is located within Conservation estate. It may however cause bank and shoreline erosion downstream, although there is legal road reserve along the river banks.</p> <p>The application will provide a secure electricity supply for the West Coast. However the dam will negative affect the local communities while being constructed due to noise and traffic in particular, and will involve a continued social effect of potential risk of dam break</p>
Policy 4.4.5.1. A wide range of compatible activities which do not individually or cumulatively adversely affect the sustainability of rural land resources shall be generally permitted to locate in the rural area.	The site is very industrial in nature, although most apparently as a temporary operation during construction. Once completed, the site will be rehabilitated back into native plantings. Once completed, the MPH can co-exist with other rural activities.
Policy 4.4.5.2. Sustainable land management practices which maintain and/or enhance the productive values of soils and amenities and character of the rural area shall be encouraged and promoted.	The MHP is mostly located within the Mokihinui Gorge, which is within Crown ownership. The proposal is therefore not impacting on the productive rural land resources which are important to the functioning of the District.
Objective 4.4.13.1 Promote land use activities which maintain or improve the water quality of the District's rivers and do not adversely affect water quantity, in order to safeguard the life supporting capacity of water.	Water quality will be impacted by the proposal. Activities such as work within the bed of the river during the diversion and dam construction, riparian clearance, removal of vegetation on the proposal lake edge, sediment and slope management will impact on water quality. The decomposition of vegetation in the lake will also impact on the quality of the water in terms of

	<p>low dissolved oxygen. However the river and the lake are expected to meet Class AE standards.</p> <p>The majority of the works within the staging area will be set back from the edge of the river by a 20 metre buffer, thus reducing the impacts downstream. Works to remove vegetation along the lake edge comes under the District Plan. The Applicant proposes where possible to remove the vegetation to the staging area. Large trees may be logged, while the balance will be used as part of the rehabilitation of the staging area. Some vegetation will be left on site, however this will be limited, to stop vegetative matter from floating and impacting on the dam intakes.</p> <p>The applicant proposes to install a log boom to stop any material from floating into the intake area. This is a permitted activity under Rule 6.2.19 which permits activities on the surface waters of lakes.</p> <p>The proposal will also result in a loss of sediment downstream which may cause erosion, both of river banks and of the beach. Monitoring is required of this.</p> <p>The applicant will modify the water quantity in the river over time, depending on electricity demand. However it will not be below normal low flow. A 'run of the river' scheme is proposed during whitebait season only.</p>
<p>Policy 4.4.14.1. Consultation and liaison with relevant interested parties contained in a non statutory register shall continue on matters relating to the land/water quality management interface within Buller District.</p>	<p>The applicant has consulted with BDC and WCRC. It has also consulted with Ngati Waewae. A CIA has been provided in regard to water management.</p>
<p>Policy 4.4.14.2. Significant ecological, cultural and heritage sites related to the water resource shall be recognised and wherever possible protected through the encouragement of integrated land management practices.</p>	<p>The loss of riparian vegetation is more than minor, as is the loss of habitat for blue duck and some other species.</p> <p>There are a number of heritage sites which will be affected. These are to be investigated and recorded, and interpretation panels erected. Artefacts are to be removed and some put in place for ongoing reference.</p> <p>The applicant has consulted with Ngati Waewae. A CIA has been provided in regard to water and heritage management.</p>
<p>Policy 4.4.14.4. The protection of water resources from adverse effects of land based activities shall be encouraged and promoted.</p>	<p>The applicant is treating strowmater and effluent so that discharges will not significantly alter water quality.</p> <p>Vegetation removal is to be undertaken in a manner that will avoid vegetative material going into the lake. Extraction is also to be undertaken so that root stock and shrubs are left in</p>

	place to reduce erosion and weed invasion.
Policy 4.4.14.5. The establishment of buffers for example, in the form of esplanade reserves or strips along the margins of lakes, rivers and the Coastal Marine Area shall be promoted and encouraged as a means of maintaining and enhancing water quality.	A 20m wide buffer is proposed between the staging area and the river. Work will however occur within the river and on the banks in places.
Policy 4.4.14.6. Identify by the year 2000, lakes, coastal estuaries and other waterways where the use of motorised craft is inappropriate because of the disturbance to wildlife, conflict with other users, degradation of natural character and disruption of natural quiet.	The Council on 3 July 2008 issued a decision about which waterways are not suitable for motorised craft. The Mokihinui River is not included on this list.
<p>Policy 4.4.14.7. To protect and enhance riparian margins adjacent to rivers, streams, lakes, wetlands and the coast for the purposes of:</p> <p>(i) Maintenance of the natural character of waterways, natural habitats and water quality including the mitigation of adverse effects of contaminant discharges and other natural and aesthetic and amenity values associated with the adjacent waterway.</p> <p>(ii) Public recreation.</p> <p>(iii) Public access.</p> <p>(iv) Maintenance of bank stability and reduction in sedimentation.</p> <p>Refer also to policies in 4.8</p>	<p>The natural character of the waterway will be changed. The wild free flowing river will be replaced with a lake. Also lost will be the habitat of blue duck and other species. The applicant will retain a 20m buffer between the staging area and the river. Upstream of the dam, it is proposed that riparian vegetation will establish.</p> <p>The application will change the recreational use of the waterway. Current usage is based on white water, being rafting and kayaking. This will be lost on the 14km stretch of river. The lake will provide alternative use for boating and black water kayaking. A jetty is to be provided, which will increase the opportunity for introduction of didymo and other pest species. Powered water craft will also change the character of the valley.</p> <p>The proposal will replace the existing track, which will improve access along the valley. It will change the experience from back country however.</p> <p>The applicant is proposing to fell trees along the lake edge, retaining their stumps and shrubs to reduce potential for erosion.</p>

MINERAL RESOURCES

Objective 4.5.4.1. To enable people and communities to provide for their economic and social wellbeing through the efficient utilisation and development of mineral resources.	The Applicant is proposing two types of gravel extraction. The first is within the bed and banks of the River in association with diversion channel and forming of the cofferdams. The second is land-based extraction within the staging area. An onsite crusher will be located on site at the staging area to create aggregate for concrete
Objective 4.5.4.2 To safeguard the life supporting capacity of air, water, soil and ecosystems and avoid, remedy or mitigate adverse effects from the use and development of mineral resources.	The area of gravel extraction is part of the river bed and the staging area, which would be affected by the development. The extraction within the staging area is to be rehabilitated with re-contouring and planting.
Policy 4.5.5.1. The adverse effects of activities related to the utilisation of mineral resources shall be avoided, remedied or mitigated.	Aggregate extraction and crushing will not occur at night. Stormwater from the site is to be directed to the detention ponds so that sediment is not

	<p>discharged to water.</p> <p>The proposal will limit sediment from entering the river, removing the ability of other operators to extract river gravels. The MHP is likely to mean no further extraction consents can be issued.</p>
Policy 4.5.5.2. The rehabilitation of mining sites shall be required where practicable.	The extraction within the staging area is to be rehabilitated with re-contouring and planting.
Policy 4.5.5.5. To require mineral resource related activities to incorporate measures to protect water quality and ecosystems, and provide for the rehabilitation of disturbed areas to generally their original condition or another suitable condition as approved by Council.	The stormwater from the aggregate area will be treated prior to discharge. A bund will be created around the site to contain the effects of the operation, including noise. The site will be re-contoured at the end of extraction and replanted. It may be possible the extraction area be used for the burying of logs from the lake edge clearance.
Policy 4.5.5.6. When rehabilitation plantings are carried out pursuant to a resource consent, preference should be given to the use of indigenous species where appropriate, with a further preference for local genetic stock where indigenous species are to be used.	The applicant proposes to replant the area in locally sourced vegetation, compliant with this policy.
Policy 4.5.5.7. To ensure that in locations where there are known mineral resources of regional significance that the presence of minerals is a relevant consideration in decision making by encouraging other land use or subdivision activities which would have the effect of rendering unusable known mineral resources of regional significance and which have the ability to locate elsewhere to do so.	It is acknowledged in the Application that the proposal will result in a reduction of sediment downstream post construction, thus reducing the ability for gravel extraction on the Mokihinui River. The MHP is likely to mean no further extraction consents are issued. This was a concern from a number of submitters.

CULTURAL/HISTORIC RESOURCES

Objective 4.6.7.1. To protect places and sites of historical and cultural value from the adverse effects of land use activities and to ensure where appropriate, access to historic and cultural sites is maintained and enhanced.	<p>The proposal will in part meet Objective 4.6.7.1 in that knowledge of the area will be improved. However inundation of the valley will mean that a number of mining sites and Seatonville will be flooded, including the pack track. Investigation of the site is proposed, along with interpretation provided along the track. Some artefacts will be relocated so that they remain available for the public.</p> <p>If an historic site is identified along the transmission route, the pole will be relocated to be at least 20m from the site.</p> <p>The applicant is proposing to work under Accidental Discovery Protocols.</p>
Policy 4.6.8.2. Evaluate and protect heritage resources by identifying those resources of historic, cultural or architectural value or of special significance to the District.	<p>The applicant has provided an assessment of the project of heritage sites. Limited information has been provided on the pack track.</p> <p>The lake will inundate the sites. Therefore investigation and recording of site is proposed. Some artefacts will be removed to be used for display. Interpretation of the history of the site will be provided.</p>
Policy 4.6.8.3. As and when cultural and/or historical sites of importance to tangata whenua are	A Cultural Impact Assessment has been provided.

identified by respective Kaitiaki in Buller District, the Council shall facilitate the recording of such sites in ways which accord with the tikanga of local iwi.	
Policy 4.6.8.4. Assessment of resource consent applications shall include their potential impact on known places of historic and/or cultural value.	The applicant has provided an assessment of the project of heritage sites. Limited information has been provided on the significance of the pack track as a main access route to the coast for both Maori and pakeha.
Policy 4.6.8.5. Continued access to sites of special cultural significance to tangata whenua shall be supported.	All access to the sites will be affected by the inundation of the lake. A new access track will however provide access up the lake to the location of the various sites.
Policy 4.6.8.6. Upon accidental discovery of urupa or skeletal remains, consultation with the tangata whenua shall be required.	A Cultural Impact Assessment has been provided, which includes the process for accidental discovery of urupa or skeletal remains.

THE COASTAL ENVIRONMENT

Objective 4.7.5.1. To maintain or enhance the natural character of the coastal environment by avoiding, remedying or mitigating the adverse effects of land use activities and subdivision requiring a coastal location.	<p>The proposed dam site is located where it will not directly alter the character of the coastal environment nor alter the availability of land for use. The proposal will also not impact on the ability of gaining access to the coast. However, an effect of placing a dam within the River will be a reduction in the amount of sediment available downstream.</p> <p>The Applicant has assessed the current coastal processes. The coastline from Nikau to Gentle Annie Point is subject to coastal retreat. Reducing the amount of sediment within the river system is likely to accelerate coastal erosion. The Applicant recognises the need to monitor the rate of erosion, and the possible need for works to be undertaken to retard the rate of erosion.</p> <p>The proposal will not be able to meet with Objective 4.7.5.1. as it will not be able to maintain or enhance the coastal environment. Instead it will have an adverse effect on the position of the coastline and the amount of coastal land available by the reduction in sediment supply.</p>
Policy 4.7.6.3. The protection and enhancement of whitebait spawning habitats shall be encouraged in conjunction with the other regulatory agencies.	Another impact on the coastal environment is the potential impact on the whitebait habitat. The effect on aquatic life is a concern to a number of submitters. The Applicant has considered a flow regime within the whitebait season to imitate the natural flow of the river. The main concern however is protecting the spawning habitat of the various species of whitebait. This is addressed elsewhere in the section 42A report.
Policy 4.7.6.4. The maintenance and enhancement of public access to and along the coastline shall be encouraged except where restrictions are necessary to ensure public safety or to avoid the potential adverse effects of people and/or vehicles on the coastal environment.	The proposal will not immediately affect public access to and along the coastline. However this will be affected by the erosion of the shore line. While the coastline is subject to erosion, the application will increase the rate of erosion, so this policy is not met.
Policy 4.7.6.7 The needs of existing and future activities requiring a coastal location shall be	With an increased rate of erosion, the use of the coastline will be affected. Some form of

recognised.	management or mitigation will be required. This does not provide for the needs of current users/occupiers, or for future needs. It is understood that the applicant is in consultation with the community as to what they would like to see. However this has not been finalised.
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ECOSYSTEMS AND NATURAL HABITATS

Objective 4.8.6.1. To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and to recognise their importance to the character and quality of the natural and physical environment and to the wellbeing of the people and communities in Buller.	The BDC has not yet completed its SNA study. The study however did not include conservation land as this was assumed to already be protected. The applicant however accepts that the application area is a significant natural area. The application will result in loss of 310 ha of vegetation, including riparian communities and river terrace vegetation. These areas will be completely lost; a significant effect within the valley. The proposal will result in the loss of habitat for blue duck along 14km stretch of the river, and habitat of other significant species. The proposal will not meet with this objective.
Policy 4.8.7.1. The adverse effects of land use activities on natural habitats and ecosystems shall be taken into account when considering development proposals which impact on these areas.	The two main effects will be the loss of riparian communities and river terrace vegetation and the loss of habitat for blue duck, kiwi and Powelliphanta. The applicant considers riparian margins will be self forming once the lake is inundated. In terms of the loss of habitat for the blue duck, the applicant is proposing to provide predator control and funding and relocation for the Powelliphanta.
Policy 4.8.7.2. The protection and enhancement of the natural values of wetlands, estuarine habitats, whitebait spawning areas, significant indigenous vegetation and significant habitats of indigenous fauna shall be encouraged.	<p>The natural character of the Mokihinui Gorge will be lost with the dam and lake, being a man made feature. This emulates what could occur naturally (ie, a lake formed by landslide), however the resultant naturalness of the valley will be reduced.</p> <p>The proposal will not directly impact on the estuary, however a reduction in sediment may impact it.</p> <p>The effects on whitebait spawning in the long term are largely unknown.</p> <p>The proposal will not protect indigenous vegetation and significant habitats of indigenous fauna within the lake area. However, the suggested offset of predator protection along the South Branch will enhance that area.</p>
<p>Policy 4.8.7.4. For the purposes of Section 6(c) of the Resource Management Act 1991, the following criteria will be used as guidelines to identify areas of significant indigenous vegetation and significant habitats of indigenous fauna.</p> <ol style="list-style-type: none"> 1. <i>Representativeness</i>: The area is one of the best examples of an association of species which is typical of the ecological district. 2. <i>Distinctiveness</i>: The area has indigenous species or an association of indigenous species which is unusual or rare in the ecological district, or endemic, or reaches its distribution limit. 3. <i>Intactness</i>: The area has a cover of predominantly indigenous vegetation, is little modified by human activity, and is not affected in a major way by weed or pest species. 	The application area has been assessed against this criteria and is considered to be significant.

<p>4. <i>Size:</i> The area of indigenous vegetation or habitat is 5ha or more in size or together with adjacent indigenous habitat is larger than 5ha; or in the case of natural wetlands is larger than 1ha in size.</p> <p>5. <i>Protected Status:</i> The area has been set aside by statute or covenant for protection or preservation.</p> <p>6. <i>Connectivity:</i> The area is connected to one or more other significant areas in a way (through ecological processes) which make a major contribution to the overall functioning of those areas.</p> <p>7. <i>Threat:</i> The area supports an indigenous species or community of species which is threatened within the ecological district or ecological region or threatened nationally.</p> <p>8. <i>Migratory Habitat:</i> The area is important as habitat for significant migratory species or for feeding, breeding or other vulnerable stages of indigenous species, including indigenous freshwater fish.</p> <p>9. <i>Scientific or Cultural Value:</i> The area is a scientific reference area, is listed as a geopreservation site, or has significant amenity value.</p>	
<p>Policy 4.8.7.6. In the interim the Council will make decisions on resource consent applications which recognise and provide for the protection of:</p> <ol style="list-style-type: none"> 1. Significant indigenous vegetation and indigenous habitat; 2. Natural values associated with riparian margins. 	<p>The application area is considered to be significant. The application is not protecting the riparian communities, nor is it protecting blue duck habitat. These will be lost with the activities. The applicant is providing off setting measures for blue duck habitat, with predator protection and funding. Also proposed is the relocation of Powelliphanta.</p>
<p>Policy 4.8.7.7. To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate use, subdivision and development.</p>	<p>The lake has been designed so that it will not impact on the ecological area above the Forks. Within the gorge however will be loss of significant vegetation and habitat.</p> <p>The transmission line is located within the Ngakawau Ecological Area. The extent of effects of the line is unknown as the applicant has applied for a 200m wide corridor in which to locate the line, although the area of disturbance will be 30m wide. Mitigation will be required to reduce the effects.</p>
<p>Policy 4.8.7.8. To encourage the retention of existing indigenous vegetation on the margins of waterways, wetlands and the coast and the enhancement of these areas through the use of indigenous vegetation where rehabilitation plantings are to be carried out.</p>	<p>The applicant is proposing a 20m wide buffer between the staging area and the river.</p> <p>Vegetation will however be cleared to the river's edge where the dam construction and power house are to be located.</p> <p>The applicant is proposing clearing trees from the lake edge, and those trees within the lake whose canopies will reach within 5m of the lake level. The applicant is not however proposing to remove stumps. Shrubs will be retained.</p>

LANDSCAPES AND NATURAL FEATURES

<p>Objective 4.9.3.1. To protect the distinctive character and unique values of outstanding landscapes</p>	<p>The application is changing the character and landscape of the area. It is replacing a wild</p>
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<p>and natural features.</p>	<p>free flow river with a lake, The location of the transmission line has not been finalised, however is proposed to be located close to existing infrastructure such as roads and powerlines and to mining activities so as to have less of an impact on undisturbed landscapes.</p> <p>The applicant has considered the application area for outstandingness in terms of regional context, rather the district wide context required.</p> <p>It is considered that the application is not protecting the current landscape, whether outstanding or not and that this objective has not been met.</p>
<p>Policy 4.9.4.1. To discourage activities which would significantly alter the character of outstanding landscapes.</p>	<p>The proposal will significantly alter the character of the area, by reducing the dramatic nature of the gorge. To some extent this will be retained with the finger lake, but not to the same extent. New lines across the Plateaux will not significantly alter the landscape as there are existing lines and mines in the area which reduce the impact.</p>
<p>Policy 4.9.4.2. Character areas shall be identified in the Plan and shall reflect the distinctive landscape elements and natural values held for each region.</p>	<p>The Council has not identified outstanding landscapes and natural features. The character areas identified in the plan relate to rural and urban character areas. Within the application area, all the land is within the Rural Zone. Surrounding the application area is the Natural Environment Character Area (Kahurangi National Park) and the township of Seddonville.</p>

NATURAL HAZARDS

<p>Objective 4.10.7.1 Taking into account community views, to reduce the risks to people and communities from natural hazards, and to avoid the establishment of activities which increase the likelihood of natural hazards occurring.</p>	<p>The applicant has not been able to quantify the risk of earthquakes on the proposed dam. As such, the consortium has not been able to conclude if risk of natural hazards are more than minor or not. This is dependent on detailed design and is considered able to achieve acceptable safety, subject to specific conditions.</p> <p>Social fear of failure of the dam is high.</p> <p>Reservoir induced earth movement is not predicted.</p> <p>The valley is subject to regular flooding. A dam break would increase the risks to the people and communities downstream.</p>
<p>Policy 4.10.8.1. Areas where natural hazards represent a significant threat to the health and safety of individuals and communities and/or to buildings or structures shall be identified as information becomes available and used in the consideration of applications for resource consent.</p>	<p>The Applicant acknowledges the level of risk likely from the Alpine Fault however has no information on the localised Glasgow Fault. As such, the level of risk is uncertain. This has implications in the design standard of the dam and the level of risk to those downstream of the dam.</p>
<p>Policy 4.10.8.2. An assessment of natural hazard risk shall be provided where appropriate with all</p>	<p>The applicant has not been able to quantify the risk of earthquakes on the proposed dam,</p>

applications for resource consents.	not complying with this policy.
Policy 4.10.8.3. Increased public awareness of causes of natural hazards and their potential impacts in specific areas of the District shall be promoted.	The applicant is proposing to include education of the possibility of earthquakes and dam break as part of their construction activities.
Policy 4.10.8.4. Mitigation works to minimise the risks of natural hazards to the safety of people and communities shall be assessed according to the degree of risk.	The design level of the dam, education, warning sirens are proposed for mitigation.
Policy 4.10.8.5. Subject to the relevant statutory provisions in the Resource Management Act and Building Act, further development in identified hazard prone locations will be restricted.	The building consent process will further consider the engineering requirements to ensure dam safety.

HAZARDOUS SUBSTANCES

Objective 4.11.5.1 To encourage and promote the safe and efficient handling and disposal of hazardous substances throughout the District.	The applicant is proposing the storage and transport hazardous substances will be in accordance with the provisions of the Hazardous Substances and New Organisms Act, complying with this objective.
Policy 4.11.6.1. Compliance with approved codes of practice and national guidelines and standards shall be required for all activities involving the use, storage and transport of hazardous substances.	The Applicant has advised that transportation, use and storage of any hazardous substances will be in accordance with the Hazardous Substances and New Organisms Act and applicable regulations, with registers for permanent and temporary hazardous substances stored on site and with the corresponding material safety data sheets at each station, thus complying with this Policy.
Policy 4.11.6.2. Appropriate contingency planning shall be required for all operators of hazardous facilities, including disposal sites.	Hazardous substance storage and transfer areas will be banded with sufficient margin to avoid spillage and procedures set in place for any contingency, meeting this policy.