| Objective | Policy | Assessment | | | |
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| National Level | | | | | |
| National Policy Statement for Renewable Electricity Gener | National Policy Statement for Renewable Electricity Generation (NPS-REG) | | | | |
| Objective: To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such | Policy A: Recognising the benefits of renewable electricity generation activities. | The proposed activity recognises the benefits of renewable electricity generation activities and seeks to enable more reliable access to the contingent storage while new renewable generation is brought online. | | | |
| that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation. | Policy C: Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities. | Both the eased access and rock armouring activities seek to manage the practical constraints associated with operating, maintaining and upgrading the existing renewable generation assets. Specifically the eased access will enable the rock armouring to occur, increasing the resilience of the infrastructure. | | | |
| | Policy D: Managing reverse sensitivity effects on renewable electricity generation activities. | The proposal does not create any reverse sensitivity effects. | | | |
| National Policy Statement for Freshwater Management 202 104(2F) RMA clauses 1.3(5) and 2.1 of the NPSFM cannot be | · · · · · · · · · · · · · · · · · · · | g the following, it is noted that pursuant to section | | | |
| 2.1 Objective: (1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises: (a) first, the health and well-being of water bodies and freshwater ecosystems (b) second, the health needs of people (such as drinking water) (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future | Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai. | As demonstrated in Section 8 above, the proposed activity takes into account cultural values associated with the lake and its water resources. The construction will be managed such that the health and well-being of the freshwater ecosystems will not be compromised. Both aspects of the proposed activity will assist Meridian to provide for the social economic and cultural wellbeing of communities at both a national and local level by improving security of supply and reducing uncertainty for consumers, and better protecting the long term stability of the dam structure | | | |
| | Policy 2: Tangata whenua are actively involved in freshwater management (including decision making processes), and Māori freshwater values are identified and provided for. | Consultation with local iwi has been undertaken to assist Meridian to identify and provide for Māori freshwater values. | | | |

| Objective | | Policy | Assessment |
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| | | Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments. | The associated assessments have considered the effects of the activity at both a local level and at a catchment wide level. On both levels, adverse impacts of the proposed activity are concluded as being negligible. |
| | | Policy 5: Freshwater is managed (including through a National Objectives Framework) to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved. | The lake is not a degraded waterbody. As demonstrated in Section 8 above, the proposed activity and associated mitigation will ensure that the health and wellbeing of the freshwater ecosystems associated with the lake are maintained. |
| | | Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted. | The Tonkin and Taylor report included in Appendix N and the Groundwater report included in Appendix I demonstrate that the proposed activity will not result in a loss of extent of natural inland wetlands or their values. |
| | | Policy 9: The habitats of indigenous freshwater species are protected. | As noted by Tonkin and Taylor the proposed activity will not compromise the habitat of indigenous freshwater species. |
| | | Policy 15: Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement. | The proposed activity will assist Meridian to provide for the social economic and cultural wellbeing of communities at both a national and local level in a manner that is consistent with this National Policy Statement. |
| Regional Level | | , | |
| | gional Policy Statement (CRPS) | 5.3.2 Development conditions (Wider Region) | The proposal provides further resilience to nationally |
| Chapter 5: Land Use and Infrastructure | 5.2.1 Location, Design and Function of Development (Entire Region) Development is located and designed so that it functions in a way that: | To enable development including regionally significant infrastructure which: | and regionally significant infrastructure while maintaining the overall quality of the environment. By enabling access to contingent storage the activity will enable Meridian to manage water more efficiently while |

| Objective | | Policy | Assessment |
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| 2. | achieves consolidated, well designed and sustainable growth in and around existing urban areas as the primary focus for accommodating the region's growth; and enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety; and which a. maintains, and where appropriate, enhances the overall quality of the natural environment of the Canterbury region, including its coastal environment, outstanding natural features and landscapes, and natural values; b. provides sufficient housing choice to meet the region's housing needs; c. encourages sustainable economic development by enabling business activities in appropriate locations; d. minimises energy use and/or improves energy efficiency; e. enables rural activities that support the rural environment including primary production; f. is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure; | 1. ensure that adverse effects are avoided, remedied or mitigated, including where these would compromise or foreclose: a. existing or consented regionally significant infrastructure; b. options for accommodating the consolidated growth and development of existing urban areas; c. the productivity of the region's soil resources, without regard to the need to make appropriate use of soil which is valued for existing or foreseeable future primary production, or through further fragmentation of rural land; d. the protection of sources of water for community supplies; e. significant natural and physical resources; 2. avoid or mitigate: natural and other hazards, or land uses that would likely result in increases in the frequency and/or severity of hazards; | optimising the ability to generate renewable electricity at times when national supply is at risk. This constitutes the continued safe, efficient and effective use of nationally and regionally significant infrastructure. As result, the proposed activity will assist Meridian to provide for the social economic and cultural wellbeing of communities at both a national and local level while creating minimal adverse effects on the natural and physical resources. Specific mitigation measures include erosion and sediment control, dust management and lizard management. |

| Objective | Policy | Assessment |
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| g. avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, and where avoidance is impracticable, remedies or mitigates those effects on those resources and infrastructure; h. facilitates the establishment of papakāinga and marae; and i. avoids conflicts between incompatible activities. 5.2.2 Integration of land-use and regionally significant infrastructure (Wider Region) In relation to the integration of land use and regionally significant infrastructure: 1. To recognise the benefits of enabling people and communities to provide for their social, economic and cultural well-being and health and safety and to provide for infrastructure that is regionally significant to the extent that it promotes sustainable management in accordance with the RMA. 2. To achieve patterns and sequencing of land-use with regionally significant infrastructure in the wider region | 5.3.9 Regionally significant infrastructure (Wider Region) In relation to regionally significant infrastructure (including transport hubs): 1. avoid development which constrains the ability of this infrastructure to be developed and used without time or other operational constraints that may arise from adverse effects relating to reverse sensitivity or safety; 2. provide for the continuation of existing infrastructure, including its maintenance and operation, without prejudice to any future decision that may be required for the ongoing operation or expansion of that infrastructure; and 3. provide for the expansion of existing infrastructure and development of new infrastructure, while: a. recognising the logistical, technical | This application in building on the previous work carried out as part of PC1 has demonstrated that the proposed eased access and rock armouring will provide for infrastructure in a manner that promotes sustainable management in accordance with the RMA. The approval of this suite of consents will provide for the continuation of the existing infrastructure, particularly its maintenance and operation, without prejudice to any future decisions regarding operation or expansion. |

| Objective | | Policy | Assessment |
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| Objective | a. development does not result in adverse effects on the operation, use and development of regionally significant b. adverse effects resulting from the development or operation of regionally significant infrastructure are avoided, remedied or mitigated as fully as practicable. c. there is increased sustainability, efficiency and liveability. | infrastructure and any need to locate activities where a natural or physical resource base exists; b. avoiding any adverse effects on significant natural and physical resources and cultural values and where this is not practicable, remedying or mitigating them, and appropriately controlling other adverse effects on the environment; and when determining any proposal within a sensitive environment (including any environment the subject of section 6 of the RMA), requiring that alternative sites, routes, methods and design of all components and associated structures are considered so that the proposal satisfies sections 5(2)(a) – (c) as fully as is practicable. | Assessment |
| Chapter 7: Fresh Water | 7.2.1 Sustainable management of freshwater The region's fresh water resources are sustainably managed to enable people and communities to provide for their economic and social well-being through abstracting and/or using water for irrigation, hydro-electricity generation and other economic activities, and for recreational and amenity values, and any economic and social activities associated with those values, providing: 1. the life-supporting capacity ecosystem processes, and indigenous species and their associated freshwater ecosystems and mauri of the fresh water is safe-guarded; | 7.3.1 Adverse effects of activities on the natural character of fresh water To identify the natural character values of fresh water bodies and their margins in the region and to: 1. preserve natural character values where there is a high state of natural character; 2. maintain natural character values where they are modified but highly valued; and 3. improve natural character values where they have been degraded to unacceptable levels; unless modification of the natural character values of a fresh water body is provided for as part of an integrated solution to water management in a catchment in accordance with Policy 7.3.9, which addresses remedying and mitigating adverse effects on the environment and its natural character values. | The proposed activities have been demonstrated through the impact assessment included in section 8 to maintain the natural character values of the lake and surrounding area noting that that the lake is a modified environment that draws some of its value from man made structures. |

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| 2. the natural character values of wetlands, lakes and rivers and their margins are preserved and these areas are protected from inappropriate subdivision, use and development and where appropriate restored or enhanced; and 3. any actual or reasonably foreseeable requirements for community and stockwater supplies and customary uses, are provided for. 7.2.3 Protection of intrinsic value of waterbodies and their riparian zones The overall quality of freshwater in the region is maintained or improved, and the life supporting capacity, ecosystem processes and indigenous species and their associated fresh water ecosystems are safeguarded. | 7.3.2 Natural character of braided rivers and lakes To maintain the natural character of braided rivers, and of natural lakes by: 1. subject to clause (3), by prohibiting the damming of each of the main-stem of the Clarence, Waiau, Hurunui, Waimakariri, Rakaia, Rangitata and Waitaki rivers; 2. in respect of every other braided river in the region; by ensuring any damming of a braided river does not reduce the braided character of the main stem; 3. in respect of every natural lake by limiting any use of the lake for water storage so its level does not exceed or fall below the upper or lower levels of its natural operating range; 4. clauses 1 – 3 do not restrict continued operation, maintenance or upgrading of any water storage scheme, irrigation scheme or hydro-electricity generation scheme for which | The proposed activities involve the continued operation and upgrading of an existing hydro-electricity scheme for which a consent was in effect when the RPS became operative. The consents sought do not alter the scale, intensity and character or result in any additional significant adverse effects on the natural character of the lake. The assessments above have confirmed that a lower level will not impact the natural operating range of the lake nor will it degrade any of the indigenous species or ecosystems in the lake or surrounding catchment. |
| | lower levels of its natural operating range; 4. clauses 1 – 3 do not restrict continued operation, maintenance or upgrading of any water storage scheme, irrigation scheme or | |

| Objective | Policy | Assessment |
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| | 7.3.3 Enhancing fresh water environments and biodiversity To promote, and where appropriate require the protection, restoration and improvement of lakes, rivers, wetlands and their riparian zones and associated Ngāi Tahu values, and to: 1. identify and protect areas of significant indigenous vegetation and significant habitats, sites of significant cultural value, wetlands, lakes and lagoons/Hapūa, and other outstanding water bodies; and 2. require the maintenance and promote the enhancement of indigenous biodiversity, inland basin ecosystems and riparian zones; and | Sites of significance to Ngãi Tahu have been identified through the consultation process and the proposal amended to avoid these areas. Furthermore as demonstrated in the Ecological Impact Assessment, the proposed work can be carried out in a manner that maintains indigenous biodiversity. |
| | 3. promote, facilitate or undertake pest control | |
| 7.2.4 Integrated management of | 7.3.4 Water quantity | The impact of the proposed activity on other freshwater |
| freshwater resources Fresh water is sustainably managed in an integrated way within and across catchments, between activities, and between agencies and people with interests in water management in the community, considering: 1. the Ngāi Tahu ethic of Ki Uta Ki Tai (from the mountains to the sea); 2. the interconnectivity of surface water and groundwater; 3. the effects of land uses and intensification of land uses on demand for water and on water quality; and 4. kaitiakitanga and the ethic of stewardship; and any net benefits of using water, and water infrastructure, and the significance of those benefits to the Canterbury region. | In relation to the management of water quantity: 1. to manage the abstraction of surface water and groundwater by establishing environmental flow regimes and water allocation regimes which: a. manage the hydrological connections of surface water, groundwater and the coastal environment; b. avoid long-term decline in groundwater levels and saltwater intrusion of coastal groundwater resources; c. protect the flows, freshes and flow variability required to safeguard the life supporting capacity, mauri, ecosystem processes and indigenous species including their associated ecosystems and protect the natural character values offresh water bodies in the catchment, including any flows required to transport sediment, to open the river mouth, or to flush coastal lagoons; | resources has been assessed in the various supporting assessments. In particular the Groundwater assessment concluded that the proposed eased access would not result in any long term decline of groundwater levels or impacts on nearby groundwater takes. Furthermore, given the short term nature of both activities and the adaptability of local ecology to fluctuating lake levels, it is considered that the proposed activities will not impact the life supporting capacity, mauri, ecosystem processes and indigenous species of the Lake Pūkaki environment. Customary uses will continue to be provided for and recreational and amenity values will be maintained. |

| Objective | Policy | Assessment |
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| | d. provide for any existing o | |
| | foreseeable needs of sur | - |
| | groundwater for individua | al, marae or |
| | community drinking wate | ror |
| | stockwater supplies; | |
| | e. support the exercise of c | ustomary |
| | uses, including any flows | required to |
| | maintain wetlands or wa | er quality for |
| | customary uses; and | |
| | f. support any flow requirer | |
| | to maintain water quality | |
| | catchment; and, having s | |
| | requirements in (a) to (f), | |
| | g. recreational values (inclu | - |
| | patterns and timing of flo | - |
| | desired by recreational u | sers) and |
| | amenity values; and | |
| | h. any actual or reasonably | |
| | demand for abstraction (than those listed in (d) ab | |
| | Policy 7.3.4(2) applies; a | |
| | 2. Where the quantum of water all | |
| | abstraction from a water body is | |
| | the maximum amount provided | |
| | environmental flow and water a | |
| | regime: | NO GARGIT |
| | a. avoid any additional alloc | eation of water |
| | for abstraction or any oth | |
| | which would result in fur | |
| | allocation; and | |
| | b. set a timeframe for identi | fying and |
| | undertaking actions to ef | |
| | phase out over-allocation | - |
| | effectively addresses any adverse effects | |
| | allocation in the interim. | |
| | 7.3.6 Freshwater Quality | Both proposed activities have been demonstrated to |
| | In relation to water quality: | have negligible effects on the quality of surface water |
| | 1. To establish and implement minimum | water quality or groundwater resources. |
| | standards for surface water and groundw | ater resources |

| Objective | Policy | Assessment |
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| | in the region which are appropriate for each water body considering: a. the values associated with maintaining life supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, and natural character of the water body; b. any current and reasonably foreseeable requirement to use the water for individual, marae or community drinking water or stockwater supplies, customary uses or contact recreation; c. the cultural significance of the fresh water body and any conditions or restrictions on the discharge of contaminants that may be necessary or appropriate to protect those values; and d. any other current or reasonably foreseeable values or uses; and 2. to manage activities which may affect water quality (including land uses), singularly or cumulatively, to maintain water quality at or above the minimum standard set for that water body; and 3. where water quality is below the minimum water quality standard set for that water body, to avoid any additional allocation of water for abstraction from that water body and any additional discharge of contaminants to that water body, where any further abstraction or discharges, either singularly or cumulatively, may further adversely affect the water quality in that water body: a. until the water quality standards for that water body are met; or b. unless the activities are undertaken as part of an integrated solution to water management in the catchment in accordance with Policy 7.3.9, which provides for the redress of water quality within that water body within a specified timeframe. | Values associated with ecosystem processes and the natural character of Lake Pūkaki have been extensively assessed in the Ecological Impact Assessment and Landscape Visual Assessment. These assessments concluded that given the short term nature of the work and the mitigation proposed, any effects will be minimal and that existing flora and fauna is adaptable to fluctuating lake levels. The short term discharge of sediment associated with the construction of the rock armouring will be managed via mitigation measures set out in the Erosion and Sediment Control plan, this includes diverting stormwater away from the lake and minimising the use of machinery directly in the lake. |
| | 7.3.10 Harvest & storage of fresh water To recognise the potential benefits of harvesting and storing surface water for: 1. improving the reliability of irrigation water and therefore efficiency of use; | Meridian seeks access to the 'contingent storage' at Lake Pūkaki, being that water between 518.0 m RL and 513.0 m RL for a three year period of expected electricity shortages while new renewable generation comes online. Furthermore, they seek to be able to |

| Objective | Policy | Assessment |
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| | 2. improving the storage potential and generation output of hydro-electricity generation activities; 3. increasing the irrigated land area in Canterbury; 4. providing resilience to the impacts of climate change on the productivity and economy of Canterbury; reducing pressure on surface water bodies, especially foothill and lowland streams, during periods of low flow; and facilitate the conversion of resource consents to abstract water under 'run of river' conditions to takes to storage, where this can be done under conditions which maintain or enhance the surface water body. 7.3.11 Existing activities and infrastructure In relation to existing activities and infrastructure: | establish rock armouring along the face of the dam to protect the integrity of the structure from wave action when lake levels are low. The proposed activities will improve the certainty of generation output and the resilience of the dam during any future periods of lower lake levels (as enabled by Meridian's current consents and the planning framework). The proposed activity represents an improvement in the efficiency of the water use and ultimately a reduction in |
| | to recognise and provide for the continuation of existing hydro-electricity generation and irrigation schemes, and other activities which involve substantial investment in infrastructure; but require improvements in water use efficiency and reductions in adverse environmental effects of these activities, where appropriate | adverse environmental effects associated with alternative non-renewable generation and sedimentation from wave erosion of the dam. |
| | 7.3.13 Resolution of freshwater management issues To encourage the involvement of people and communities in the management of fresh water, including: 1. community stewardship of water resources and programmes to address fresh water issues at a local catchment level; 2. Ngāi Tahu, as tāngata whenua, exercising kaitiakitanga in accordance with tikanga Māori; and 3. providing opportunities for consent holders to take greater stewardship of fresh water resources, within consent conditions. | Meridian has consulted with local iwi with respect to this application. As a result of this: |

| Objective | | Policy | Assessment |
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| Chapter 9: Ecosystems and Indigenous Biodiversity | 9.2.1 Halting the decline of Canterbury's ecosystems and indigenous biodiversity The decline in the quality and quantity of Canterbury's ecosystems and indigenous biodiversity is halted and their lifesupporting capacity and mauri safeguarded. 9.2.2 Restoration or enhancement of | 9.3.1 Protecting significant natural areas | The quality and quantity of ecosystems and indigenous biodiversity in the Lake Pūkaki area is well protected and not considered to be in a state of decline. The proposed activities are of a short duration and will be managed in a manner that maintains the life supporting capacity of these ecosystems. Restoration or enhancement of ecosystem functioning |
| | ecosystems and indigenous biodiversity Restoration or enhancement of ecosystem functioning and indigenous biodiversity, in appropriate locations, particularly where it can contribute to Canterbury's distinctive natural character and identity and to the social, cultural, environmental and | Significance, with respect to ecosystems and indigenous biodiversity, will be determined by assessing areas and habitats against the following matters: a. Representativeness b. Rarity or distinctive features c. Diversity and pattern d. Ecological context | and indigenous biodiversity is not proposed as part of this application beyond the reinstatement of those areas disturbed during the construction stage of the project. The proposed reinstatement will be like for like and will therefore return the lake shore to its existing natural character. |
| | economic well-being of its people and communities. 9.2.3 Protection of significant indigenous vegetation and habitats Areas of significant indigenous vegetation and significant habitats of indigenous fauna are identified and their values and | The assessment of each matter will be made using the criteria listed in Appendix 3. 2. Areas or habitats are considered to be significant if they meet one or more of the criteria in Appendix 3. 3. Areas identified as significant will be protected to ensure no net loss of indigenous biodiversity or indigenous biodiversity values as a result of land use activities. | The significance with respect to ecosystems and indigenous biodiversity in accordance with Policy 9.3.1 has been specifically addressed in the Ecological Impact Assessment. The Ecological Impact assessment concludes that values and functions associated with the local |
| | ecosystem functions protected | 9.3.2 Priorities for protection To recognise the following national priorities for protection: | ecosystems will be protected by the short term duration of the proposed activities and the mitigation proposed. Minimal indigenous vegetation is present on the site |
| | | Indigenous vegetation in land environments where less than 20% of the original indigenous vegetation cover remains. Areas of indigenous vegetation associated with sand dunes and wetlands. Areas of indigenous vegetation located in "originally rare" terrestrial ecosystem types not | which will be reinstated if affected by works. A Lizard Management Plan has been prepared which will facilitate the identification and management of any at risk or threatened species that may be disturbed by the proposed works. |
| | | covered under (1) and (2) above. Habitats of threatened and at risk indigenous species | |

| Objective | | Policy | Assessment |
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| | | In relation to wetlands: 1. To assess an ecologically significant wetland against the matters set out in Policy 9.3.1 and the national priorities listed in Policy 9.3.2 For the purposes of this policy, ecologically significant wetlands do not include areas that are predominantly pasture and dominated by exotic plant species and where they are not significant habits of indigenous fauna. 2. To ensure that the natural, physical, cultural, amenity, recreational and historic heritage values of Canterbury's ecologically significant wetlands are protected. 3. To generally promote the protection, enhancement and restoration of all of Canterbury's remaining wetlands. 4. To encourage the formation of created wetlands that contribute to the restoration of indigenous biodiversity. To protect adjoining areas of indigenous and other vegetation which extend outside an ecologically significant wetland and are necessary for the ecological functioning of the wetland. | The supporting assessments identify one wetland (Tasman Delta) as being potentially impacted by the proposed activity. This wetland is recognised as being adaptable to the existing fluctuations in lake level, with its extent varying by 100's of meters each year. Given the short term duration of the proposed eased access, any impact on this wetland is considered to be within the scope of its adaptability such that its form and function is appropriately protected. |
| Chapter 10: Beds of Rivers and Lakes and their Riparian Zones | and riparian zones and protection and enhancement of bed and riparian zone values Enable subdivision, use and development of river and lake beds and their riparian zones while protecting all significant values of those areas, and enhancing those values in appropriate locations. | 10.3.1 Activities in river and lake beds and their riparian zones To provide for activities in river and lake beds and their riparian zones, including the planting and removal of vegetation and the removal of bed material, while: 1. recognising the implications of the activity on the whole catchment; 2. ensuring that significant bed and riparian zone values are maintained or enhanced; or avoiding significant adverse effects on the values of those beds and their riparian zones, unless they are necessary for the maintenance, operation, upgrade, and repair of essential structures, or for the prevention of losses from floods, in which case significant adverse effects should be mitigated or remedied. | As noted in Section 8, the majority of the works will take place on the dam face, rather than the lake bed, with only a small potion of works on the lake bed itself. The work on the lake bed will be limited to a small amount of excavation associated with the construction of a 'toe' for the armouring to sit on. This small portion of work will have negligible adverse effects on the values of the bed. |

| Objective | | Policy | Assessment |
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| | 10.2.2 Maintenance of flood-carrying capacity of rivers To maintain the flood-carrying capacity of rivers. | 10.3.2 Protection and enhancement of areas of river and lake beds and their riparian zone. 1. To preserve the natural character of river and lake beds and their margins and protect them from inappropriate subdivision, use and development, and where appropriate to maintain and/or enhance areas of river and lake beds and their margins and riparian zones where: 1. they exist in a degraded state and enhancement will achieve long-term improvement in those values; 2. they have ecological values for which protection and/or enhancement will assist in the establishment or re-establishment of indigenous biodiversity or ecosystems, particularly for ecosystems that are threatened or unrepresented in protected areas; 3. they have existing significant trout or salmon habitat; 4. maintenance and/or enhancement will improve or establish connections between habitats and create corridors for indigenous species and trout and salmon and their movement between areas; 5. riparian zones provide a buffer from activities that may adversely affect bed values; 6. opportunities exist to create habitat corridors for plants and animals; or 7. riparian zones provide spawning or other significant habitats for at risk or threatened species, such as inanga or Canterbury mudfish. 10.3.3 Management for flood control and protecting essential structures To manage activities in river and lake beds and their banks or margins to: | The proposed rock armouring works will enable better protection of the dam from erosion and maintain the stability, performance and operation of a significant structure. The proposed works will increase the |
| | 10.2.3 Protection of essential structures Protection of the stability, performance and operation of essential structures from activities in river and lake beds and on their banks or margins. | avoid or, where this is not practicable, to remedy or mitigate adverse effects on vegetation that controls flood flows or protects river banks or lake margins from erosion; and avoid adverse effects on the stability, performance, operation, maintenance, upgrade and repair of | resilience of essential structures. |

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| | | essential structures that are located in, on, under or | |
| | | over a river or lade bed or its bank or margin | |
| | 10.2.4 Public and Ngāi Tahu access to | 10.3.5 Maintenance and enhancement of public and | Through consultation, a Nohoanga site has been |
| | and along rivers and lakes | Ngāi Tahu access | identified in the Lake Pūkaki Reserve. The Nohoanga |
| | Maintenance and enhancement of public | To promote the maintenance and enhancement of | designation provides Ngāi Tahu Whānui with exclusive |
| | Ngāi Tahu access to and along rivers and lakes. | public and Ngāi Tahu access to and along the beds of rivers and lakes, and to ensure that subdivision use and development does not result in inappropriate loss of existing access, subject to: 1. protecting public health and safety, and | rights to occupy the site for up to 30 days between 16 August and 30 April each year. As a result, the construction methodology has been amended to avoid disturbance of this area. This will ensure that Ngai Tahu cultural values associated with this area of the lake |
| | | avoiding conflict between different types of access; 2. avoiding adverse effects on the values of the beds, or stability of banks; 3. protecting Ngāi Tahu cultural values and sites of significance from inappropriate public access; 4. protecting the stability, performance and operation of essential structures in, on, under or over the beds; 5. ensuring the integrity of flood-protection vegetation is maintained; 6. avoiding conflicts with the legal rights and lawful activities of owners/occupiers of river or lake beds and adjacent land, or of the owners/operators of infrastructure in, on, under or over the bed; and engaging with the Walking Access Commission to | shore are protected. |
| | | identify and negotiate issues around public access | |
| Chapter 12: | 12.2.1 Identification and protection of | 12.3.1 Identification of outstanding natural features | The Mackenzie Basin is identified as an Outstanding |
| Landscape | outstanding natural features and | and landscapes | Natural Landscape in the RPS and in Plan Change 13 to |
| | landscapes | To identify the outstanding natural features and | the Mackenzie District Plan. The Landscape Visual |
| | Outstanding natural features and | landscapes for the Canterbury region, while: | Assessment included in Appendix O acknowledges that |
| | landscapes within the Canterbury region | recognising that the values set out in Appendix A indicate the systemotics natural features. | while man made, the infrastructure associated with the |
| | are identified and their values are | 4 indicate the outstanding natural features | WPS form an important part of that landscape. The |
| | specifically recognised and protected from | and landscapes for Canterbury, at a regional | eased access may result in additional areas of the lake |
| | inappropriate subdivision, use, and development. | scale; and enabling the specific boundaries of outstanding natural features and landscapes, for inclusion in plans, to be | bed being visible for short periods of time over the next three years, however as noted in the assessment, this is not considered to be out of character with the |

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| | | determined through detailed assessments which address the assessment matters set out in Policy 12.3.4(1). | surrounding landscape. The proposed rock armouring works may result in some short term impacts during construction, however following construction the site will be visually indistinguishable from the surrounding area. Accordingly, it is considered that the proposed activities ensure the outstanding natural landscape within which Lake Pūkaki is located will continue to be recognised and protected. |
| | 12.2.2 Identification and management of other landscapes The identification and management of other important landscapes that are not outstanding natural landscapes. Other important landscapes may include: 1. natural character 2. amenity 3. historic and cultural heritage | 12.3.2 Management methods for outstanding natural features and landscapes To ensure management methods in relation to subdivision, use or development, seek to achieve protection of outstanding natural features and landscapes from inappropriate subdivision, use and development. | |
| Chapter 14: Air Quality | 14.2.1 Maintain or improve ambient air quality Maintain or improve ambient air quality so that it is not a danger to people's health and safety, and reduce the nuisance effects of low ambient air quality. | 14.3.1 Maintain and improve ambient air quality In relation to ambient air quality: To set standards to maintain ambient air quality in Canterbury based on concentrations of contaminants that cause adverse health effects and nuisance Where existing ambient air quality is higher than required by the standards set, to only allow the discharge of contaminants into air where the adverse effects of the discharge on ambient air quality are minor. To give priority to ensuring that PM10 ambient air quality improvements are achieved in Rangiora, Kaiapoi, Christchurch, Ashburton, Timaru, Geraldine and Waimate. | Air quality assessments undertaken in support of this application have demonstrated that ambient air quality in the area surrounding the lake is likely high with brief dust storms in certain conditions that temporarily lower the ambient air quality. With respect to the eased access, the assessments conclude that given the short term duration of the events, any increase in the duration or intensity of dust storms will be low. In addition, discharges associated with the construction of the rock armouring will also be low and can be mitigated if required using a range of dust management techniques as set out in the Dust Management Plans. Accordingly it is considered that any adverse impacts will be less than minor and not contrary to this objective and policy. |

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| 14.2.2 Localised adverse effects of discharges on air quality Enable the discharges of contaminants into air provided there are no significant localised adverse effects on social, cultural and amenity values, flora and fauna, and other natural and physical resources. | 14.3.5 Relationship between discharges to air and sensitive land-uses In relation to the proximity of discharges to air and sensitive land-uses: 1. To avoid encroachment of new development on existing activities discharging to air where the new development is sensitive to those discharges, unless any reverse sensitivity effects of the new development can be avoided or mitigated. 2. Existing activities that require resource consents to discharge contaminants into air, particularly where reverse sensitivity is an issue, are to adopt the best practicable option to prevent or minimise any actual or likely adverse effect on the environment. New activities which require resource consents to discharge contaminants into air are to locate away from sensitive land uses and receiving environments unless adverse effects of the discharge can be avoided or mitigated. | The air quality assessments identified a number of potential receptors in the surrounding area. Notwithstanding this sufficient separation distances are available, along with the range of dust management measures proposed to ensure that adverse impacts are avoided or minimised. |

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| Chapter 16: 1 Energy s | Reliable and resilient generation and supply of energy for the region, and wider contributions beyond Canterbury, with a particular emphasis on renewable energy, which: 1. provides for the appropriate use of the region's renewable resources to generate energy; 2. reduces dependency on fossil fuels; 3. improves the efficient end-use of energy; 4. minimises transmission losses; 5. is diverse in the location, type and scale of renewable energy development; 6. recognises the locational constraints in the development of renewable electricity generation activities; and a. avoids any adverse effects on significant natural and physical resources and cultural values or where this is not practicable, remedies or mitigates; and b. appropriately controls other adverse effects on the environment | 16.3.3 Benefits of renewable energy generation facilities To recognise and provide for the local, regional and national benefits when considering proposed or existing renewable energy generation facilities, having particular regard to the following: 1. maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions; 2. maintaining or increasing the security of supply at local and regional levels, and also wider contributions beyond Canterbury; by diversifying the type and/or location of electricity generation; 3. using renewable natural resources rather than finite resources; 4. the reversibility of the adverse effects on the environment of some renewable electricity generation facilities; 5. avoiding reliance on imported fuels for the purposes of generating electricity; and assisting in meeting international climate obligations. | Meridian seeks access to the 'contingent storage' at Lake Pūkaki, being that water between 518.0 m RL and 513.0 m RL for a 3 year period of expected electricity shortages while new renewable generation comes online. Furthermore, they seek to be able to establish rock armouring along the face of the dam to better protect the integrity of the structure from wave action when lake levels are low. The proposed activities will promote efficient energy use, improve the certainty of generation output and the resilience of the dam during any future periods of lower lake levels (as enabled by Meridian's current consents and the planning framework). It also reduces the use of finite resources by efficiently using existing renewable electricity generation infrastructure where there is an existing operational and technical need. |

16.3.5 Efficient, reliable and resilient electricity generation within Canterbury

To recognise and provide for efficient, reliable and resilient electricity generation within Canterbury by:

- avoiding subdivision, use and development which limits the generation capacity from existing or consented electricity generation infrastructure to be used, upgraded or maintained;
- enabling the upgrade of existing, or development of new electricity generation infrastructure, with a particular emphasis on encouraging the operation, maintenance and upgrade of renewable electricity generation activities and associated infrastructure:
 - having particular regard to the locational, functional, operational or technical constraints that result in renewable electricity generation activities being located or designed in the manner proposed;
 - b. provided that, as a result of site, design and method selection:
 - the adverse effects on significant natural and physical resources or cultural values are avoided, or where this is not practicable remedied, mitigated or offset; and
 - ii. other adverse effects on the environment are appropriately controlled.
- providing for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation;
- maintaining the generation output and enabling the maximum electricity supply benefit to be

obtained from the existing electricity generation facilities within Canterbury, where this can be achieved

| | without resulting in additional significant adverse effects on the environment which are not fully offset or compensated. | |
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| Chapter 17 – Contaminated Land Chapter 18 – Hazardous | 17.2.1 Protection from adverse effects of contaminated land Protection of people and the environment from both on-site and off-site adverse effects of contaminated land 18.2.1 Avoid, Remedy or mitigate adverse effects | To seek to identify Contaminated Land To seek to identify all land in the region that was historically, or is presently, being used for an activity that has, or could have, resulted in the contamination of that land, and where appropriate, verify the existence and nature of contamination. 18.3.1 Protection of sensitive areas and activities Avoid actual or potential adverse effects, resulting from | As noted in Section 7.2 of this report while several HAIL activities have been identified as present within the wider property within which the site is located, due to the nature of the contaminants and the distance to the proposed works area, it is unlikely that contaminated soils are present at the site The proposed construction methodology and ESCP include measures to protect the lake bed from |
| Substances | Adverse effects on the environment from the storage, use, disposal and transportation of hazardous substances are avoided, remedied or mitigated. | the use, storage or disposal of hazardous substances, in the following locations: 1. High hazard areas 2. Within a community drinking water protection zone, or within such a distance from a community drinking water supply that there is a risk of contamination of that drinking water source 3. In areas of unconfined or semi-confined aquifer, where the depth to groundwater is such that there is a risk of contamination of that groundwater 4. Within the coastal marine area and in the beds of lakes and rivers 5. Within any area identified by a district or regional plan as being sensitive to the potential effects of hazardous substances, which may include, but are not limited to, areas such as wāhi tapu, urupā, institutions and residential areas. 18.3.2 Avoid, remedy or mitigate adverse effects To avoid, remedy or mitigate adverse effects on the environment, including contamination of land, air and water, associated with the storage, use, transportation or disposal of hazardous substances. | hazardous substances. These measures include storing any hazardous substances away from the lake, requiring machinery to be inspected for leaks before it enters the lake, and emergency spill procedures. The proposed measures are considered sufficient to ensure the effects are mitigated. |

| Objective | Policy | Assessment |
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| | Regional Plan (WCWARP) – incorporated in accordance with national poli | y statement, national planning standard or other national |
| | | Ecosystem values have been assessed in detail in the Ecological Impact Assessment prepared by Tonkin and Taylor and included in Appendix N. This assessment concludes that values and functions associated with the local ecosystems will be protected by the short term duration of the proposed activities and the mitigation proposed. The supporting assessments identify one wetland (Tasman Delta) as being potentially impacted by the proposed activity. This wetland is recognised as being adaptable to the existing fluctuations in lake level, with its extent varying by 100's of meters each year. Given the short term duration of the proposed eased access, any impact on this wetland is considered to be within the scope of its adaptability such that its form and function is appropriately protected. Furthermore, with respect to Policy 5A.3, the WPS is considered specified infrastructure and as such this policy does not apply noting that the proposed works will provide significant national and regional benefits |
| | water or draining of any wetland which is likely to result in any mor than minor adverse change in the natural variability of flows or level any fresh water, compared to that which immediately preceded the commencement of the new activi or the change in the established activity (or in the case of a change an intermittent or seasonal activit compared to that on the last occasion on which the activity wa carried out). | and there is no practical alternative location for the activity. of y in |

| Objective | Policy | Assessment |
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| • | 5A.3 | |
| | The loss of extent of natural inland wetlands is avoided, | |
| | their values are protected, and their | |
| | restoration is promoted, except where: | |
| | a. the loss of extent or values arises from any of | |
| | the following: | |
| | i. the customary harvest of food or | |
| | resources undertaken in accordance | |
| | with tikanga Māori | |
| | ii. wetland maintenance, restoration, or | |
| | biosecurity (as defined in the National | |
| | Policy Statement for Freshwater | |
| | Management 2020) | |
| | iii. scientific research | |
| | iv. the sustainable harvest of sphagnum | |
| | moss | |
| | v. the construction or maintenance of | |
| | wetland utility structures (as defined in | |
| | the Resource Management (National Environmental Standards for | |
| | Freshwater) Regulations 2020) | |
| | vi. the maintenance or operation of | |
| | specified infrastructure, or other | |
| | infrastructure (as defined in the | |
| | Resource Management (National | |
| | Environmental Standards for | |
| | Freshwater) Regulations 2020 | |
| | vii. natural hazard works (as defined in the | |
| | Resource Management (National | |
| | Environmental Standards for | |
| | Freshwater) Regulations 2020); or | |
| | b. the regional council is satisfied that: | |
| | i. the activity is necessary for the purpose | |
| | of the construction or upgrade of | |
| | specified infrastructure; and | |
| | ii. the specified infrastructure will provide | |
| | significant national or regional benefits; | |
| | and | |

| Objective | | Policy | Assessment |
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| | | iii. there is a functional need for the specified infrastructure in that location; and iv. the effects of the activity are managed through applying the effects management hierarchy; or | |
| Chapter 6: | Objective 1 | 5A.4 The loss of river extent and values is avoided, unless the council is satisfied: a. that there is a functional need for the activity in that location; and b. the effects of the activity are managed by applying the effects management hierarchy Policy 1 | The supporting technical reports including the |
| Chapter 6: Objectives | To sustain the qualities of the environment of the Waitaki River and associated beds, banks, margins, tributaries, islands, lakes, wetlands and aquifers by: a. recognising the importance of maintaining the integrity of the mauri in meeting the specific spiritual and cultural needs of the tāngata whenua, and by recognising the interconnected nature of the river b. safeguarding the life supporting capacity of the river and its Ecosystems c. managing the water bodies in a way that maintains natural landscape and amenity characteristics and qualities that people appreciate and enjoy | By recognising the importance of connectedness between all parts of the catchment from the mountains to the sea and between all parts of freshwater systems of the Waitaki River and associated beds, banks, margins, tributaries, islands, lakes, wetlands and aquifers. | groundwater assessment, structures assessment, ecological impact assessment and hydrology assessment have all taken a holistic approach to understand the impacts of the proposed activities across the catchment. These assessments have considered the potential impacts of the proposed eased access on surrounding waterways, groundwater systems and wetlands as well as the various ways in which people interact with these parts of the freshwater systems. The assessments conclude that given the short term nature of the proposed activities, any adverse impacts will be minimised (via proposed conditions) and the life supporting capacity of the system maintained. |

| Objective | Policy | Assessment |
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| d. safeguarding the integrity, form, functioning and resilience of the braided river system e. providing for individuals' reasonab domestic water needs f. providing for individuals' reasonab needs for their animals' drinkingwater g. providing for fire-fighting water needs. Objective 2 To the extent consistent with Objective 1, to enable people and communities to provide for their social, economic and cultural wellbeing and their health and safety, by providing for water for: a. Town and Community water supplies c. hydro-electricity generation d. Agricultural and horticultural activities e. Industrial and commercial activities f. Tourism and recreation facilities a. f. Any other activities | | As noted previously, Meridian seeks access to the 'contingent storage' at Lake Pūkaki, being that water between 518.0 m RL and 513.0 m RL for a 3 year period of expected electricity shortages while new renewable generation comes online. Furthermore, they seek to be able to establish rock armouring along the face of the dam to protect the integrity of the structure from wave action. The proposed activities will enable Meridian to provide for the wellbeing of local and national communities by providing improved access to water for hydro-electricity generation at times when the national electricity supply system is under stress. |
| | Policies for Lakes Tekapo, Pūkaki and Ōhau Policy 35 By setting minimum lake levels that recognise the iconic nature and the mana of Lakes Tekapo, Pūkaki and Ōhau, and enable appropriate access to water for the activities identified in Objective 2, to the extent consistent with Objective 1. The minimum lake level applies to all takes, damming, diversion or uses of water for other than town and community water supplies, stock drinking-water, and tourism and recreational facilities from the lakes and from the canals leading from them. | |

| Objective | Policy | Assessment |
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| | Policy 4 | While the proposed activity technically deviates from |
| | By considering the following matters when setting | the set level regime for the lake, the deviation is |
| | environmental flow and level regimes: | considered to be a technical one only, with activities |
| | a. mauri and healthy ecosystems of indigenous | resulting in the same outcome being provided for in the |
| | species, including mahinga kai species; | plan. Specifically, the plan has a pathway for the lake |
| | b. wāhi tapu sites or areas, and wāhi taonga; | to be lowered to 513.0 m RL under particular scenarios. |
| | c. natural character, landscape, and visual | While not limited to the same triggers as the existing |
| | amenity; | framework, the proposed eased access will result in |
| | d. vegetation within and adjacent to the water | the lake potentially being lowered for an equivalent |
| | body; | period of time. As such the matters set out in Policy 4 |
| | e. habitats including those of invertebrates, birds | have already been considered. |
| | and fish; | |
| | f. fish passage, as appropriate, including | |
| | controlling spread of non-indigenous species | |
| | into | |
| | a. new areas; | |
| | g. undesirable periphyton and sediment | |
| | accumulation; | |
| | h. effects on water quality; | |
| | i. maintenance of groundwater flows; | |
| | j. naturally occurring dry river or stream beds; | |
| | k. the potential for establishment of invading | |
| | exotic vegetation; | |
| | l. bedload and sediment transport processes; | |
| | m. shoreline or bank erosion; | |
| | n. functioning of the river mouth; | |
| | o. recreation opportunities; | |
| | p. existing flow and level regimes, physical | |
| | resources and activities; | |
| | q. the amount and reliability of water that can be | |
| | taken, used, dammed or diverted; and | |
| | accessibility to water bodies and their margins | |
| | Policy 12 | The proposed activities recognise the importance of |
| | To establish an allocation to each of the activities listed | the Lake Pūkaki infrastructure and the need for |
| | in Objective 2 by: | Meridian to maintain it and prevent future degradation. |
| | a. having regard to the likely national and local | The body of this application has demonstrated that the |
| | effects of those activities; | proposed activities can be undertaken in a manner that |
| | b. reference to relevant national, regional and | appropriately mitigates adverse effects including |
| | local plans and strategies; | |

| Objective | Policy | Assessment |
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| | c. recognising the iconic nature of Lakes Tekapo, Pūkaki and Ōhau; d. recognising the importance of Lakes Tekapo, Pūkaki, Ōhau Ruataniwha, Benmore, Aviemore and Waitaki and their associated infrastructure to New Zealand's electricity system; e. recognising the importance of irrigation for agriculture and horticulture; f. considering the relative environmental effects of the activities including effects on landscape, water quality, mauri, and the beds of lakes and rivers; ga. reserving water within the Lower Waitaki for the enhancement of mahinga kai, and the associated tāngata whenua values and the augmentation of flows into Wainono Lagoon; g. assuming a high level of efficacy and technical efficiency; h. giving a preference to needs for water within the catchment; and i. expressing the allocation to activities in annual volumes: • upstream of the outlets of each of Lakes Tekapo, Pūkaki, and Ōhau; • upstream of Waitaki Dam; • downstream of Waitaki Dam but upstream of Black Point; and | effects on landscape, water quality, mauri and the bed of the lake. |
| | Policy 36 By providing for temporary lowering of Lakes Tekapo and Pūkaki for the purpose of electricity generation only in times of national or South Island power shortage as established by the Electricity Commission | Meridian seeks approval to temporarily lower Lake Pūkaki without a power shortage being established by the Electricity Commission. While this is contrary to Policy 36 the national benefit achieved by the activity is considered to outweigh the tension with this Policy. The proposal is taking a precautionary approach to ensure the risks of power shortages (both South Island and national) are much reduced over the next three |

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| | | Policy 37 By providing for the temporary lowering of Lakes Tekapo, Pūkaki and Ōhau where necessary for the purposes of maintenance or rehabilitation of electricity generation infrastructure. | years therefore increasing security of energy supply. The lowering of the lake will only occur for a limited period of time and has similar effects to the scenarios outlined in this policy. The application has demonstrated that the proposed eased access can be undertaken in a manner that mitigates any potential adverse effects on the environment and is consistent with effects enabled through the current planning framework. The temporary lowering will facilitate the establishment of rock armouring on the dam face. This will increase the resilience of this nationally important infrastructure. |
| Canterbury Lan | d and Water Regional Plan (LWRP) | | |
| | 3.3 Nationally and regionally significant infrastructure is enabled and is resilient and positively contributes to economic, cultural and social wellbeing through its efficient and effective operation, ongoing maintenance, repair, development and upgrading. | | The proposed rock armouring is required to ensure the resilience of the Pūkaki Dam into the future. At present the dam has been identified as being at risk of wave erosion when operating at lower levels. Accordingly, Meridian seeks consent to establish rock protection to prevent this from occurring. The proposed eased access will facilitate this as well as enabling Meridian to provide for the economic and social wellbeing of the community through the more efficient use of the |
| | 3.6 Water is recognised as essential to all life and respected for its intrinsic values. | Water is managed through the setting of limits to safeguard the life-supporting capacity of ecosystems, support customary uses, and provide for community drinking-water supplies and stock water, as a first priority and to meet the needs of people and communities for water for irrigation, hydro-electricity generation and other economic activities and to maintain river flows and lake levels needed for recreational activities, as a second priority. | resource during a period of expected shortages. |

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| | 3.8 The quality and quantity of water in fresh water bodies and their catchments is managed to safeguard the life-supporting capacity of ecosystems and ecosystem processes, including ensuring sufficient flow and quality of water to support the habitat and feeding, breeding, migratory and other behavioural requirements of indigenous species, nesting birds and, where appropriate, trout and salmon. | 4.18 The loss or discharge of sediment or sediment-laden water and other contaminants to surface water from earthworks, including roading, works in the bed of a river or lake, land development or construction, is avoided, and if this is not achievable, the best practicable option is used to minimise the loss or discharge to water. | The proposed activity involves incidental discharges to water associated with the rock armouring. As part of the construction methodology, mitigation measures are proposed to minimise the impact of these discharges. These mitigation measures include limiting the work in or immediately adjacent to the lake, monitoring, and directing stormwater away from the lake. Given the short term nature of the proposed works and the mitigation proposed, any effects on the life-supporting capacity of the local ecosystems are considered to be appropriately managed. |
| | 3.17 The significant indigenous biodiversity values of rivers, wetlands and hāpua are protected. | 4.101 Avoid the damage or loss of any Critical Habitat caused by sediment discharges, vegetation clearance, excavation or deposition of material, or other disturbance in, or on the bed, banks or riparian margins of a river, lake or wetland unless: a. it is not practicable to avoid adverse effects; and b. where adverse effects cannot be avoided, they are minimised; and c. where adverse effects cannot be minimised, they are remedied where practicable; and d. where more than minor residual adverse effects cannot be avoided, minimised, or remedied, aquatic offsetting is provided where possible; and if aquatic offsetting of more than minor residual adverse effects is not possible, aquatic compensation is provided. | As demonstrated in the Ecological Impact Assessment prepared by Tonkin and Taylor and included in Appendix N the proposed eased access and rock armouring will not result in any damage or loss of critical habitat in the bed, banks or riparian margins of the lake. |
| | 3.18 Wetlands that contribute to cultural and community values, biodiversity, water quality, mahinga kai, water cleansing and flood mitigation are maintained. | 4.85 Water quality, indigenous biodiversity and ecosystem health in lakes, rivers, wetlands, hāpua, coastal lakes and lagoons are enhanced through establishing or restoring riparian planting. | The supporting assessments identify one wetland (Tasman Delta) as being potentially impacted by the proposed activity. This wetland is recognised as being adaptable to the existing fluctuations in lake level, with its extent varying by 100's of meters each year. Given the short term duration of the proposed eased access, any impact on this wetland is considered to be such that its community and biodiversity values are maintained. |

| Objective | | Policy | Assessment |
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| | 3.19 Natural character values of freshwater bodies, including braided rivers and their margins, wetlands, hāpua and coastal | 4.86 Activities that occur in the beds or margins of lakes, rivers, wetlands, hāpua, coastal lakes and, lagoons are managed or undertaken so that: | Through consultation, a Nohoanga site has been identified in the Lake Pūkaki Reserve. The Nohoanga designation provides provides Ngãi Tahu Whānui with exclusive rights to occupy the site for up to 30 days |
| | lagoons, are protected. | a. the character and channel characteristics of rivers including the variable channel characteristics of braided rivers are preserved; b. sites and areas of significant indigenous biodiversity values or of cultural significance to Ngāi Tahu are protected; and existing lawful access to the bed of the lake, river, wetland, hāpua, coastal lake, or lagoon for recreational, customary use, water intakes or supplies or flood control purposes, is not precluded, except where necessary to protect public health and safety. | between 16 August and 30 April each year. As a result, the construction methodology has been amended to avoid disturbance of this area. This will ensure that Ngai Tahu cultural values associated with this area of the lake shore are protected. |
| | All activities operate at good environmental practice or better to optimise efficient resource use and protect the region's fresh water resources from quality and quantity degradation | The discharge of contaminants to groundwater from earthworks, excavation, waste collection or disposal sites and contaminated land is avoided or minimised by ensuring that: (a) activities are sited, designed and managed to avoid the contamination of groundwater; (b) existing or closed landfills and contaminated land are managed and monitored where appropriate to minimise any contamination of groundwater; and there is sufficient thickness of undisturbed sediment in the confining layer over the Coastal Confined Aquifer System to prevent the entry of contaminants into the aquifer or an upward hydraulic gradient is present which would prevent aquifer contamination. | Any contaminant discharge associated with the construction activities are likely to be minimal and associated with the operation of machinery within the site. Management practices are proposed in relation to the storage and management of hazardous substances and in relation to the inspection of vehicles operating on site to mitigate any potential effects. Furthermore, spill kits will be maintained on site during the works to enable contractors to respond quickly to any accidental discharge. Good environmental practice will be followed to protect the water resources. |

| Objective | | Policy | Assessment |
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| | | 4.88 Earthworks, structures, or the planting or removal of vegetation (other than by spraying) in the beds of lakes, rivers, hāpua, coastal lakes and lagoons, or within a wetland boundary do not occur in flowing or standing water unless any effects on water quality, ecosystems, or the amenity, recreational or cultural values will be minor or the effects of diverting water are more significant than the effects of the activity occurring in flowing or standing water. | In this instance it is necessary to undertake some work in standing water in order to complete the rock armouring. The amount of time required for this aspect of the work will be minimised and site management practices put in place to mitigate any potential effects. This includes inspecting machinery to ensure it is clean and free of spill residue prior to it entering the lake, and minimising the number of entry/exit points from the lake. As demonstrated in the technical assessments, it is considered that the proposed mitigation is appropriate such that any effects on water quality, ecosystems, amenity, recreational or cultural values will be less than minor. |
| | | 4.90 Any modification of the levels of lakes which are artificially managed does not create or exacerbate significant shoreline erosion. This policy does not apply to the artificial opening of hāpua, coastal lakes or lagoons to the sea. | As demonstrated in the geomorphology report included in Appendix J the proposed works will not create or exacerbate shoreline erosion. The rock armouring work is specifically intended to mitigate dam erosion during lower lake levels. |
| Canterbury Air | r Regional Plan (CARP) | | |
| Chapter 5: Objectives | 5.1 Air quality protects the mauri and life supporting capacity of the environment. | 6.1 Discharges of contaminants into air, either individually or in combination with other discharges, do not cause: a. diverse effects on human health and wellbeing; or b. adverse effects on the mauri and life supporting capacity of ecosystems, plants or animals; or c. significantly diminished visibility; or d. significant soiling or corrosion of structures or property. | Potential air discharges have been assessed in detail in Appendix L and M. These reports demonstrate that any impacts associated with the eased access will be comparable to those that exist at present, and specifically limited to any dust storm events. Modelling has shown that given the short duration of the proposed events, they are unlikely to result in impacts beyond those that occur under the current regime. With respect to the rock armouring work, while some discharges are unavoidable, mitigation can be put in place to ensure that human health and wellbeing is protected as is the mauri and life supporting capacity of ecosystems, plants and animals. |
| | 5.3 Competing demands for the use of the air resource of Canterbury are accommodated while unacceptable degradation of <i>ambient air</i> quality is avoided. | 6.14 Recognise the contribution of nationally and regionally significant infrastructure to people's social and economic wellbeing and provide for discharges associated with the development, operation, and maintenance of that infrastructure. | Consent is sought to enable Meridian to more effectively manage the resource in the short term while new renewable energy resources are brought online. |

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| District Level | | | |
| Operative Ma | ckenzie District Plan (MDP) | | |
| Section 7: Rural | Objective 2 – Natural Character of Waterbodies and their Margins The preservation of the natural character and functioning of the District's lakes, rivers, and wetlands and their margins, and the promotion of public access along these areas. | Policy 2A – Controlling Adverse Effects Managing by way of standards, guidelines and good management techniques, the adverse effects of activities such as earthworks, vegetation clearance, tree plantings and buildings that have the potential to threaten the survival of riparian vegetation and habitat, or to have significant adverse effects on public access and recreation, river, lake or wetland ecology, natural character, maintenance of bank stability, or water quality and quantity. Policy 2B – Riparian Margins To encourage the protection of natural character and conservation values of riparian areas and adjacent water bodies and the provision of public access along riparian margins | As demonstrated in Ecological Impact Assessment included in Appendix N, the proposed activity will be managed such that it avoids effects that threaten the survival of riparian vegetation and habitat. Furthermore, any adverse effects on public access and recreation will be short term while the construction activities are being carried out. During this time alternative locations will be available to access the lake. As noted in the Landscape Visual Assessment, the WPS forms part of the accepted natural character of the area. The proposed works are in keeping with that natural character and once completed will be visually indistinguishable from the surrounding environment. |
| | Objective 3A – Landscape Values Protection of outstanding landscape values, the natural character of the margins of lakes, rivers and wetlands and of those natural processes and elements | Policy 3A1 – Important Landscapes and Natural Features To limit earthworks on steeper slopes, high altitude areas, and on land containing geopreservation sites to enable the landforms and landscape character of these areas to be maintained. | The surrounding environment is an Outstanding Natural Landscape in the Mackenzie District Plan, however earthworks are not proposed on steep slopes, at high altitude sites or on land containing geo preservation sites. Furthermore, the site is not located in a Scenic Viewing Area, and as demonstrated in the Landscape |

| Objective | | Policy | Assessment |
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| | which contribute to the District's overall character and amenity. | Policy 3A2 – Scenic Viewing Areas To limit structures and tall vegetation within scenic viewing areas to enable views of the landscape to be obtained within and from these areas. | Visual Assessment, any adverse effects on visual amenity arising from the eased access will be of a short duration and visually indistinguishable when viewed from a distance (as is the case with the viewing areas). |
| | | Policy 3A3 – Impacts of Subdivision Use and Development Avoid or mitigate the effects of subdivision, uses or development which have the potential to modify or detract from areas with a high degree of naturalness, visibility, aesthetic value, including important landscapes, landforms and other natural features. | |
| | Objective 3B - Activities in the | Policy 3B1 – Recognition of the Mackenzie Basin's | The proposed activity involves essential work to |
| | Mackenzie Basin's outstanding natural | Distinctive Characteristics | improve the resilience of the existing WPS, in |
| | landscape (1) Subject to (2)(a), to protect and enhance the outstanding natural landscape of the Mackenzie Basin subzone in particular the following characteristics and/or values: (a) the openness and vastness of the landscape; (b) the tussock grasslands; (c) the lack of houses and other structures; (d) residential development limited to small areas in clusters; (e) the form of the mountains, hills and moraines, encircling and/or located in, the Mackenzie Basin; (f) undeveloped lakesides and State Highway 8 roadside; | (1) To recognise that within the Mackenzie Basin's outstanding natural landscape there are: (a) Many areas where development beyond pastoral activities is either generally inappropriate or should be avoided; (b) Some areas with greater capacity to absorb different or more intensive use and development, including areas of low or medium visual vulnerability and identified Farm Base Areas; (c) Areas, places and features of particular significance to Ngãi Tahu. (2) To identify, describe and map as overlays, specific areas within the Mackenzie Basin that assist in the protection and enhancement of the characteristics and/or values of the outstanding natural landscape contained in Objective 3B(1) being: (a) Lakeside Protection Areas, shown on the planning maps | particularly the integrity of the dam structure. The proposed rock armouring is to be undertaken within an existing area of development. The adjacent areas contain a carpark, visitor centre, MCAS and Electricity Generation Infrastructure. The site is therefore not pristine lake shore, but rather an active, existing part of the Scheme. The proposed works will be within the existing footprint of the scheme and therefore further consideration of this Objective and Policy is not necessary. |

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| | (2) To ma | intain and develop structures | | (b) | Scenic Viewing Areas, in Appendix J and | |
| | and w | orks for the Waitaki Power | | | shown on the planning maps | |
| | Schen | ne: | | (c) | Scenic Grassland Areas, in Appendix J | |
| | (a) v | within the existing footprints of | | | and shown on the planning maps; | |
| | t | he Tekapo-Pūkaki and Ohau | | (d) | Sites of Natural Significance, in Appendix | |
| | (| Canal Corridor, the Tekapo, | | | I and shown on the planning maps, and | |
| | F | Pūkaki and Ohau Rivers, along | | (e) | Land above 900m in altitude, shown on | |
| | t | he existing transmission lines, | | | the planning maps. | |
| | á | and in the Crown-owned land | (3) | As p | art of an assessment of the suitability of | |
| | | containing Lakes Tekapo, | | an a | rea for a change in use for development: | |
| | F | Pūkaki, Ruataniwha and Ohau | | (a) | To identify whether the proposed site has | |
| | a | and subject only (in respect of | | | high, medium or low ability to absorb | |
| | l | andscape values) to the | | | development according to Appendix V | |
| | C | objectives, policies and | | | (Areas of Landscape Management); | |
| | r | methods of implementation | | (b) | To require an assessment of landscape | |
| | V | within Chapter 15 (Utilities) | | | character sensitivity (incorporating | |
| | ϵ | except for management of | | | natural factors including geomorphology, | |
| | ϵ | exotic tree species in respect of | | | hydrology, ecology, vegetation cover, | |
| | | which all objective (1) and all | | | cultural patterns, landscape condition | |
| | | mplementing policies and | | | and aesthetic factors such as | |
| | | nethods in this section apply; | | | naturalness and remoteness). | |
| | (-) | elsewhere within the Mackenzie | _ | | akeside Protection Areas | As noted above, the proposal does not include any |
| | | Basin subzone so as to achieve | | | ecognise the significance of the lakes of Te | additional permanent buildings or structures required |
| | | objective (1) above. | | | ahuna/the Mackenzie Basin, their margins | for the WPS. |
| | . , | ct to objective 3B(1) above and | | | settings to Ngāi Tahu and to recognise the | |
| | | al objectives 1, 2 and 4: | | • | cial importance of the Mackenzie Basin's | The proposal involves the upgrading and maintenance |
| | ` ' | to enable pastoral farming; | | | s, their margins, and their settings in | of an existing element of the Waitaki Power Scheme. |
| | (b) | to manage pastoral | | | eving Objective 3B; | |
| | | intensification and/or | , , | | ect to (c), to avoid adverse impacts of | |
| | | agricultural conversion | | | dings, structures and uses on the | |
| | | throughout the Mackenzie | | | scape values and character of the | |
| | | Basin and to identify areas | | | kenzie Basin lakes and their margins; | |
| | | where they may be enabled | | | rovide for the upgrading maintenance and | |
| | | (such as Farm Base Areas); | | | ancement of the existing elements of the | |
| | (c) | to enable rural residential | | | aki Power Scheme; | |
| | | subdivision, cluster housing | | | void, remedy or mitigate the adverse | |
| | | and farm buildings within | | | acts of further buildings and structures | |
| | | Farm Base Areas around | | requ | ired for the Waitaki Power Scheme on the | |

| Objective | | Policy | Assessment |
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| | existing homesteads (where they are outside hazard areas) | landscape values and character of the Basin's lakes and their margins. | |
| | | Policy 3B8 – Renewable Energy To recognise and provide for the use and development of renewable energy generation and transmission infrastructure and operations within the footprint of current operations or on land owned by infrastructure operators as at 1 October 2011 while, as far as practicable, avoiding, remedying or mitigating significant adverse effects on the outstanding natural landscape and features of the Mackenzie Basin. | The proposed activity involves essential work to improve the resilience of the existing WPS, in particular the integrity of the dam structure. The proposed rock armouring is to be undertaken within an existing area of development. The adjacent areas contain a carpark, visitor centre, MCAS and Electricity Generation Infrastructure. The site is therefore not pristine lake shore, but rather an active, existing part of the Scheme. The proposed works will be undertaken in a manner that avoids significant adverse effects on the outstanding natural landscape and features of the Mackenzie Basin. |
| | | Policy 3B10 - Hazards To avoid hazards caused by power generation, including water storage, water transport by canal and aqueduct or where it has been demonstrated that avoidance is not necessary, remedy or mitigate the adverse effects of the hazard. | The proposed activity will not result in any hazards. |
| | Objective 8 – Activities on Waterbodies Activities being undertaken on the District's waterbodies in a manner which avoids, remedies or mitigates potential adverse effects on conservation values, wildlife and wildlife habitats, public health and safety, the Waitaki Power Scheme, recreational values, takata whenua values and general amenity values. Renzie District Plan (PMDP) | Policy 8E – Effects on Wildlife and Wildlife Habitat To avoid, remedy or mitigate the adverse effects of recreational and commercial use of waterbodies on wildlife and wildlife habitats. | The proposed activities will be managed in a manner that mitigates any adverse effects on wildlife and wildlife habitats. As discussed in the Ecological Impact Assessment and associated Lizard Management Plan, the activities will have minimal effects due to the adaptability of species present in the area. Notwithstanding this, the Lizard Management Plan provides protocols to follow should any threatened or at risk species be found. These protocols are considered appropriate. |

| Objective | | Policy | Assessment |
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| Part 2 - Strategic Direction: A Thriving Community | ATC-O3 Infrastructure The importance of the District and beyond of infrastructure, particularly nationally and regionally significant infrastructure, is recognised and provided for. | REG-P1 Benefits Recognise and provide for the national, regional, and local benefits of renewable electricity generation activities and assets, including avoiding, reducing, or displacing greenhouse gas emissions. | The proposed activity recognises the benefits of renewable electricity generation activities and seeks to enable more reliable access to the contingent storage while new renewable generation is brought online. |
| (ATC) | ATC-O4 Renewable Electricity The local, regional and national benefits of the District's renewable electricity generation and electricity transmission activities and assets are recognised and their development, operation, maintenance and upgrade are provided for and reverse sensitivity effects on those activities and assets are avoided. | | |
| Mana Whenua (MW) | MW-O1 Mana Whenua Values The role of mana whenua is recognised and their historic and contemporary relationship with the District's land, water bodies, indigenous species and other sites and areas of significance are recognised and provided for. | | The role of mana whenua and their relationship with the area has been recognised and provided for in the development of the construction methodology. As a result of consultation, changes were made to avoid disturbance of the Nohoanga area adjacent to the camping ground. The avoidance of this area during the construction period will enable mana whenua to continue to exercise their customary activities in accordance with tikanga. |
| | MW-O2 Mana Whenua Involvement Mana whenua are able to: 1. be actively involved in decision making that affects their values and interests; 2. exercise their kaitiakitaka responsibilities; and 3. carry out customary activities in accordance with tikanga. | | |

| Objective | | Policy | Assessment |
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| Natural Environment (NE) | The values of the natural environment, including those that make the District unique, contribute to its character, identity and well-being, or have significant or outstanding intrinsic values, are recognised and provided for, and where appropriate protected and enhanced. This includes, but is not limited to, values associated with the following important natural resources: 1. mahika kai resources; 2. night sky darkness; 3. outstanding natural features and landscapes; 4. significant indigenous biodiversity; and | | As noted previously, the surrounding environment is an Outstanding Natural Landscape in the Mackenzie District Plan, however as demonstrated in the Landscape Visual Assessment, the WPS is an accepted and important part of the existing landscape and any adverse effects on visual amenity arising from the eased access and rock armouring will be of a short duration and visually indistinguishable when viewed from a distance (as is the case with the viewing areas). Furthermore, the appended technical reports have demonstrated that the works can be carried out in a manner that recognises and provides for indigenous biodiversity and waterbodies and their margins. |
| | 5. water bodies and their margins. REG-O3 Te Manahuna / Mackenzie Basin ONL - Waitaki Power Scheme To maintain and develop structures and works for the Waitaki Power Scheme: 1. within the existing footprints of the Takapō / Tekapo - Pūkaki and Ōhau Canal Corridor, the Takapo, Pūkaki and Ōhau Rivers, along the existing transmission lines, and in the Crown-owned land containing Lakes Takapō / Tekapo, Pūkaki, Ruataniwha and Ōhau and subject only (in respect of landscape values) to the objectives, policies and methods of implementation within this chapter, except for management of exotic tree species in respect of which NFL-O3.1 and all implementing policies and methods in the NFL Chapter apply; | REG-P2 Te Manahuna / Mackenzie Basin ONL - Renewable Energy To recognise and provide for the use and development of renewable energy generation and transmission infrastructure and operations within the footprint of current operations or on land owned by infrastructure operators as at 1 October 2011 while, as far as practicable, avoiding, remedying or mitigating significant adverse effects on the outstanding natural landscape and features of Te Manahuna / the Mackenzie Basin. | The existing infrastructure was established on site prior to 2011. Its maintenance and development are therefore provided for by this objective and policy. The proposed rock armouring is required in order to improve the resilience of the dam and will largely be undertaken within the footprint of current operations and entirely on land owned by Meridian. |

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| Objective | 2. elsewhere within Te Manahuna / | Folicy | Assessment |
| | the Mackenzie Basin ONL so as | | |
| | to achieve NFL-O3.1. | | |
| | to define vervi E Go. 1. | | |
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| Natural | NH-O2 Critical Infrastructure, Major | | This policy applies to new critical infrastructure and is |
| Hazards (NH) | Hazard Facilities and Specific Buildings | | not considered applicable to the proposed activities. |
| | in Natural Hazard Overlays | | |
| | Critical infrastructure is not | | |
| | located in areas of high natural | | |
| | hazard risk unless there is a | | |
| | functional need or operational | | |
| | need to be at the location; | | |
| | 2. If there is a functional need or | | |
| | operational need to be within | | |
| | areas of high natural hazard risk | | |
| | the critical infrastructure must, | | |
| | as far as practicable, be designed | | |
| | to be resilient to the effects of | | |
| | natural hazards, while achieving | | |
| | the objectives of the critical | | |
| | infrastructure; | | |
| | New critical infrastructure avoids | | |
| | increasing the risks of natural | | |
| | hazards to people, property and | | |
| | infrastructure or, where | | |
| | avoidance is not practicable, | | |
| | mitigation measures minimise | | |
| | such risks; and | | |
| | 4. Major hazard facilities, | | |
| | healthcare facilities, emergency | | |
| | services facilities, education | | |
| | facilities or visitor | | |
| | accommodation activities avoid | | |
| | locating in areas of high natural | | |

| Objective | | Policy | Assessment |
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| | hazard risk associated with surface fault rupture where the effects on occupants and neighbours are assessed as being unacceptable. | | |
| Natural Environment Values: Natural Character (NATC) | NATC-01 Preservation of Natural Character The natural character of wetlands, lakes and rivers (surface waterbodies) and their margins is recognised, preserved and protected from inappropriate subdivision, use and development. | NATC-P1 Recognition of Natural Character Values Recognise that natural character values of wetlands, lakes and rivers and their riparian margins are derived from: 1. being in their natural state or close to their natural state; 2. the value of the waterbody to mana whenua, including values associated with traditional and contemporary uses and continuing ability of the waterbody to support taoka species, mahika kai and other customary uses; 3. indigenous biodiversity, habitats and ecosystems; 4. their contribution to landforms and landscapes, through hydrological, geologic and geomorphic processes; and people's experience of the above elements, patterns and processes. | As noted in the appended Groundwater Assessment, the lake and associated wetlands and rivers currently experience high levels of fluctuation in terms of water levels and extent and have become adaptable to these fluctuations. The variable lake level contributes to the natural character values of the area and provides a range of environments to support indigenous biodiversity, habitats and ecosystems. The short term eased access proposal will only temporarily alter this and in doing so will not jeopardise the various local ecosystems. The proposed rock armouring works are considered an appropriate use of the site given the need to protect the dam structure from wave erosion. Once completed the dam face will be visually indistinguishable from the existing. |
| | NATC-02 Mana Whenua Values The relationship of mana whenua with wetlands, lakes and rivers is recognised and their cultural traditions, values and interests in relation to these is provided for. | NATC-P2 Preservation of Natural Character Values Preserve and protect the natural character values of wetlands, lakes and rivers and their margins from inappropriate use and development by: 1. ensuring that the location, intensity, scale and form of subdivision, use and development takes into account the natural character values of the surface waterbodies; 2. requiring setbacks for activities from wetlands, and lakes and rivers, including buildings, earthworks, woodlots and quarrying activities; | |

| Objective | | Policy | Assessment |
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| | | 3. promoting and encouraging opportunities to restore and rehabilitate the natural character of surface waterbodies and their margins, including the removal of plant and animal pests, and supporting initiatives for the regeneration of indigenous biodiversity values and cultural values; and avoiding inappropriate use and development that detracts from the natural character of surface waterbodies. | |
| Natural | NFL-O1 Outstanding Natural Features | NFL-P1 Protection of Outstanding Natural Features | As noted previously, the surrounding environment is an |
| Features and | and Landscapes Values | and Landscapes | Outstanding Natural Landscape in the Mackenzie |
| Landscapes | Protection of outstanding landscape | Recognise the values of the identified ONF and ONL | District Plan, however as demonstrated in the |
| (NFL) | values and of those natural processes and | overlays on the Planning Maps and protect these values | Landscape Visual Assessment, the WPS is an accepted |
| | elements which contribute to the District's | from adverse effects by: | and important part of the existing landscape and any |
| | overall character and amenity. | avoiding inappropriate subdivision, use and development in those parts of outstanding natural features and landscapes with limited capacity to absorb such change; avoiding inappropriate use and development that detracts from extensive open views, or detracts from or damages the unique landforms and landscape features; managing building density, scale and form to ensure it remains at a low level, maintains a predominance of vegetation cover and sense of low levels of human occupation; avoiding buildings and structures that break the skyline; ensuring buildings and structures are designed to minimise glare and the need for earthworks, and are mitigated by plantings to reduce their visual impact where appropriate; recognising and providing protection for identified values in Sites and Areas of Significance to Māori; and recognising the existence of working pastoral farms and their contribution to the outstanding natural features | adverse effects on visual amenity arising from the eased access and rock armouring will be of a short duration and visually indistinguishable when viewed from a distance (as is the case with the scenic viewing areas). Specifically, the rock armouring will be situated below the operating lake level most of the time and only become visible during the three years of eased access or during subsequent OCC or SSA campaigns. The construction areas will be reinstated following the works, returning the site to its current form. |

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| | | and landscapes of the Te Manahuna/Mackenzie District. | |
| Waitaki lwi Ma | nagement Plan 2019 | | |
| Chapter 2: Strategic Objectives | The mauri of water is protected, restored and enhanced throughout the Waitaki catchment. | | Given the mitigation measures that are proposed to be implemented during construction and the short term duration of the proposed works, the mauri of the waters of Lake Pūkaki are considered to be protected. |
| | Abundant mahika kai species are available and accessible for manawhenua to gather. Mahika kai species and their habitats are protected, restored and enhanced. Manawhenua can exercise rakatirataka and kaitiakitaka over significant mahika kai areas and species. | | The proposed eased access and rock armouring work will not impact on the availability or accessibility of mahika kai species. Furthermore, as noted in the Ecological Impact Assessment, the habitats of indigenous flora and fauna present within and immediately adjacent to the lake will be protected. |
| | Wāhi Tūpuna • Wāhi tūpuna are protected and the relationship Manawhenua have with these landscapes is enhanced. | | There are no identified Wāhi tupuna in the vicinity of the site. Notwithstanding this, Meridian recognises the importance of the nearby Nohoanga site and has made amendments to the construction methodology to avoid restricting access to this site. |

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| Chapter 5: | The mauri of the waters of the Waitaki, Kā Roimata o Aoraki, is actively protected. S.2.5 Discharges The direct discharge to waterways and moana of contaminants, nutrients and wastewater is avoided. | 5.1.3 Wai Tapu 2. 2. Protect Kā Roimata o Aoraki—the source streams of Aoraki. 3. Encourage the discharge to land of treated wastewater and stormwater that meets Manawhenua aspirations. 8. Require management plans for discharge activities that detail the procedure for containing spills and emergency response plans for extraordinary events arising from natural hazards. | There are no known Wai tapu in the vicinity of the proposed activities. Notwithstanding this the value of the waters of the Waitaki is acknowledged as is the need to protect it. The proposed eased access is not considered to impact on the mauri of the Waitaki, however it is acknowledged that if not done properly, the proposed rock armouring could result in adverse impacts. In order to minimise any potential impacts, Meridian has developed a construction methodology and erosion and sediment control plan that minimises the duration of the work and the scale of the work in water and that prioritises the implementation of erosion and sediment control procedures including contouring work areas to minimise direct runoff to the lake, the use of a single entry point to minimise the extent of lakeside disturbance, and the watering down of dry surfaces to minimise wind blown sediment. Where practicable it is proposed to discharge stormwater to land and avoid direct discharges to the lake. The Erosion and Sediment Control plan includes procedures for containing spills and an emergency response plan. |
| | 5.2.7 Riparian Management 1. Riparian management supports ecological and Manawhenua values including access to waterways. 3. Riparian wetlands are fully protected and operate in their natural state supporting flourishing populations of taoka species. | | Access to the lake will be maintained at all stages of the proposed activity. One wetland has been identified as being potentially impacted by the proposed eased access, however as noted in the Hydrological Assessment, this wetland is highly adaptable, with its extent varying each year as the lake level changes. The associated Ecological Impact Assessment supports this position and notes that the species present in and around this wetland are adaptable and unlikely to be impacted by the short duration of the proposed lowering events. |

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| 5.3.2 Upper Waitaki and Tributaries The Takapō, Pūkaki and Ōhau Rivers have flow continuity ki uta ki tai, from the mountains to the sea. The high water quality in lakes at present is maintained. The cultural reference condition of Lakes Takapō, Pūkaki and Ōhau is maintained The Manawhenua values of lakes Takapō, Pūkaki and Ōhau are recognised and provided for. | Negotiate flows within the Takapō, Pūkaki and Ōhau rivers below their dams that provide for Manawhenua values and use and in-stream values. Oppose further extraction from all tributaries above lakes Takapō, Pūkaki and Ōhau. Work with agencies to eliminate algal blooms in Lake Alexandrina. Require restoration of flows in the Takapō, Pūkaki and Ōhau rivers to: a. Provide for the needs of indigenous migratory fish (including eels). b. Provide for a range of aquatic habitats (in stream, wetland and connected wetland); and c. Maintain the natural braided character of the river channels. Investigate the restoration of flows in the Takapō, Pūkaki and Ōhau rivers to provide for migrating species at specific times of the year. Reseed taoka species once the flow regime on the Takapō River is restored. Require the prohibition of vehicle access in the riverbed of the lower Takapō River. Oppose further hydrological alteration of Lakes Takapō, Pūkaki and Ōhau, where this would have adverse effects on the Manawhenua cultural reference condition of these lakes. Promote the restoration of Lakes Takapō, Pūkaki and Ōhau to provide for Manawhenua values and uses. Require that the present quality of the waters upstream of Lake Pūkakī to be maintained | While the proposed eased access involves hydrological alteration of Lake Pūkaki, this is proposed to be short term only and for a maximum term of three years. Furthermore, as demonstrated in the appended technical reports, the eased access will not impact on the ability of local mana whenua to exercise their customary rights and will not restrict access to areas of cultural importance. The proposed hydrological alteration will not result in adverse effects on the Manawhenua cultural reference condition of the lake. |

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| Chapter 6: | 6.5 Ecosystem wellbeing | 6. | Require ornithology reports as part of | The appended technical reports demonstrate that the |
| Mahika Kai | The historical range and distribution | | resource consent applications and conditions | proposed activities can be undertaken in a manner that |
| and | of indigenous biodiversity and | | that protect areas where indigenous birds are | maintains the existing range and distribution of |
| Ecosystems | mahika kai species within mahika | | known or found to roost, breed or nest. | indigenous biodiversity within the lake. There are no |
| | kai areas is restored | 8. | Identify and protect areas of significant | known bird breeding or roosting areas in the vicinity of |
| | 2. Indigenous fish, bird and plant | | indigenous vegetation through statutory | the rock armouring, and any disturbance of indigenous |
| | species are protected and where | | planning processes and through resource | vegetation will be minimised. |
| | required, restored, in all parts of the | | consents, and review processes. | |
| | Waitaki catchment. | | | |
| | 4. The Waitaki catchment supports a | | | |
| | rich and diverse community of | | | |
| | macroinvertebrates, supported by | | | |
| | natural river and stream processes | | | |
| | and clean water that allows the | | | |
| | sensitive species to flourish. | | | |