

Response ID ANON-URZ4-5FR8-T

Submitted to Fast-track approval applications
Submitted on 2024-05-03 13:19:00

Submitter details

Is this application for section 2a or 2b?

2A

1 Submitter name

Individual or organisation name:
Lake McKay Hydro Limited

2 Contact person

Contact person name:
Tim O'Sullivan

3 What is your job title

Job title:
Director

4 What is your contact email address?

Email:
s 9(2)(a)

5 What is your phone number?

Phone number:
s 9(2)(a)

6 What is your postal address?

Postal address:
s 9(2)(a)

7 Is your address for service different from your postal address?

Yes

Organisation:
Gallaway Cook Allan, Lawyers

Contact person:
Bridget Irving / Hannah Perkin

Phone number:
s 9(2)(a)

Email address:
s 9(2)(a)

Job title:
Partner

Please enter your service address:

PO Box 143
Dunedin 9054

Section 1: Project location

Site address or location

Add the address or describe the location:

Lake McKay Station

Wanaka-Luggate State Highway.

Lake McKay Station comprises approximately 6100Ha from the Pisa Range to SH6 near Luggate township. The water bodies are within the property (Alice Burn) or form the Property Boundary (Luggate Creek)

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Map identifying scheme.png was uploaded

Do you have a current copy of the relevant Record(s) of Title?

Yes

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Who are the registered legal land owner(s)?

Please write your answer here:

Lake McKay Station Limited

The Crown (River Bed (LINZ) and Marginal Strip (DoC)

Detail the nature of the applicant's legal interest (if any) in the land on which the project will occur

Please write your answer here:

The Applicant is a special purpose company formed to carry out the proposed development. It is owned by the same shareholder and has the same Directors as the Landowner Lake McKay Station Limited.

In relation to the Crown owned land the Applicant will require a Concession for Marginal Strip (which will be sought via this Fast Track process) and an easement over the River Bed pursuant to the Land Act 1948.

Section 2: Project details

What is the project name?

Please write your answer here:

Lake McKay Hydro Scheme

What is the project summary?

Please write your answer here:

Develop an integrated hydrogeneration scheme within the Luggate Creek Catchment taking and discharging water from Luggate Creek and the Alice Burn, utilising new and existing infrastructure on Lake McKay Station.

What are the project details?

Please write your answer here:

Generation of 3.65MW via a two-part scheme within the Luggate Creek Catchment and associated distribution infrastructure to connect to the local electricity distribution network.

- Alice Burn – 250l/s generating 1.4MW – utilising existing irrigation intake and new penstock, holding tanks/ponds, generators and discharge point.
- Luggate Creek – 450l/s generating 2.25MW – establishment of new weir intake, penstock, holding tanks/ponds, generators and discharge points.
- Associated electricity distribution infrastructure to connect the scheme to the local distribution network.

Describe the staging of the project, including the nature and timing of the staging

Please write your answer here:

The two creeks naturally provide the ability to build two generation systems that connect to common electricity distribution infrastructure.

The Alice Burn would be constructed first given it will utilise the existing irrigation intake infrastructure. The electricity distribution connections would be established as part of Alice Burn commissioning.

The Luggate Creek component would be commenced post the commissioning of the Alice Burn. It is a larger system but is effectively a duplicate in terms of system design.

The applicant is ready to commence as soon as approvals are obtained. There is a 3-4 month lead-in time for the provision of the pipes and generators. During that time site works would commence to establish access, ponds/tanks, buildings etc. Overall, the full scheme is expected to take 15 months to construct and commission.

Due to the investment required to establish the connection to the distribution network the scheme requires both components to be viable.

What are the details of the regime under which approval is being sought?

Please write your answer here:

Resource Management Act 1991 –

- Land use consents to carry out earthworks, establish buildings, electricity lines and construct intake and discharge infrastructure within the bed of the river.
- Permit to take and non-consumptively use water.
- Permit to discharge water.
- Permit to establish structures within the bed of a river.

Conservation Act 1987 – Concession to occupy marginal strip and potentially the water races.

Heritage New Zealand Pouhere Taonga Act 2014 – archaeological authority to modify/adaptively reuse an archaeological site – namely a historic water race

Wildlife Act 1953 – Wildlife Permit to disturb herpetofauna.

If you seeking approval under the Resource Management Act, who are the relevant local authorities?

Please write your answer here:

Queenstown Lakes District Council
Otago Regional Council

What applications have you already made for approvals on the same or a similar project?

Please write your answer here:

RM 23.546.01 (consent) Take and use surface water from the Alice Burn for hydroelectricity generation – consent granted for 6 year term (expires November 2029). It has not been possible to obtain funding due to the short consent term and the costs associated with the distribution infrastructure.

RM 23.550 (application) – Take and use water from Luggate Creek for hydroelectricity generation – notified to affected parties and currently on hold.

Is approval required for the project by someone other than the applicant?

Yes

Please explain your answer here:

Some works are required within River Bed administered on behalf of the Crown by LINZ. An easement will be required under the Land Act 1948. These applications are currently being prepared.

If the approval(s) are granted, when do you anticipate construction activities will begin, and be completed?

Please write your answer here:

Based on the assumption that approval would be granted in January 2025, the high level timeline would be:

- detailed design - January 2025
- Pricing - January - April 2025
- Planning - January – June 2025
- Funding - January – June 2025
- Procurement - June – November 2025
- Site works commencement - November 2025
- Construction - November 2025 to January 2027
- Commissioning - March 2026 for Alice Burn and January 2027 for Luggate Creek
- Completion - January 2027

Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

Queenstown Lakes District Council
Otago Regional Council
Te Runānga o Ngāi Tahu
Aukaha and Te Ao Mārama Inc as representatives for Papatipu Runaka.
Dept of Conservation
Heritage New Zealand Pouhere Taonga
Land Information New Zealand
Aurora Energy Limited

Detail all consultation undertaken with the persons referred to above. Include a statement explaining how engagement has informed the project.

Please write your answer here:

Aukaha and Te Ao Mārama Incorporated were provided with copies of the application for the proposal and an opportunity to attend a site visit via helicopter was given. Due to availability of Iwi representatives the site visit was not able to take place. The Applicant has sought to address issues of concern to Runaka through the provision of residual flows at the intake points to maintain mauri and habitat between the take and discharge points in the scheme, and by undertaking extensive ecological surveys of the accessible reaches of the creeks to confirm little to no adverse effects on indigenous fish species. The Applicant understands that Runaka have concerns about the proposal from a water allocation perspective and how this relates to the current provisions of the Otago Regional Plan: Water.

Consultation with Queenstown Lakes District Council has included preliminary meetings setting out the proposed activities and discussing potential mitigations. Feedback has been provided about the possible methods to mitigate effects, particularly those associated with small buildings, rehabilitation of disturbed ground and other aspects which the applicant is incorporating into its proposal. The proposed conditions will include controls on building materials and requirements to rehabilitate disturbed ground to address this feedback.

The Applicant discussed the proposal with Otago Regional Council, in particular take rates, methods for constructing the intake, diversion and discharge infrastructure and utilisation of residual flows to manage effects. ORC staff have undertaken a site visit, including by helicopter to see all the affected areas and the wider catchment surrounding the water bodies. These discussions have informed the application and the development of proposed conditions of consent, particularly residual flow conditions.

Department of Conservation staff have also undertaken a site visit and provided input into the assessments supporting the application through discussions with the Applicant's ecologist. The Department's freshwater ecologist considers that the scheme is unlikely to result in adverse effects to indigenous fish. The Applicant will engage in further consultation once it has completed the terrestrial ecology assessment.

The applicant has engaged a qualified archaeologist to provide an assessment of use of the historic water race for supporting a section of the hydro penstock, and advise on any approvals or controls needed to protect this heritage feature. To this end, initial consultation has been undertaken with Heritage New Zealand and the Department of Conservation to establish what concerns, if any, these parties have in relation to use of the race. These discussions are ongoing and will inform proposed conditions.

The application documents have been provided to Land Information New Zealand for their consideration as they administer the Crown Land (River Bed). No concerns were raised and affected party approval was given.

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Describe any processes already undertaken under the Public Works Act 1981 in relation to the land or any part of the land on which the project will occur:

Please write your answer here:

N/A

Section 4: Iwi authorities and Treaty settlements

What treaty settlements apply to the geographical location of the project?

Please write your answer here:

Ngāi Tahu Claims Settlement Act 1998.
Clutha River / Mata Au Statutory Acknowledgement Area.

The Ngāi Tahu Claims Settlement Act was passed to provide a package of redress to mitigate, remedy, and acknowledge the Crown's breaches of the Treaty of Waitangi. The key elements to the Ngāi Tahu Settlement package:

- Apology: The Crown apologised to Ngāi Tahu for the suffering and hardship caused to Ngāi Tahu and confirmed the validity of the Ngāi Tahu claims.
- Aoraki: The Crown returned Aoraki to Ngāi Tahu to be renamed and co-managed.
- Economic redress: Ngāi Tahu was given finance and mechanisms to re-establish its tribal base.
- Cultural redress: Restoring Ngāi Tahu's kaitiakitanga.

- Non-tribal redress: The Crown offered a firm commitment to resolve all private claims within a specified period of time.
- Mana recognition: Statutory Acknowledgements, Deeds of Recognition, Tōpuni.
- Mahinga kai: Noahonga, customary rights, management of taonga species.

STATUTORY ACKNOWLEDGEMENT AREAS

The Clutha River/Mata Au is identified as a statutory acknowledgement area pursuant to schedule 40 of the Ngai Tahu Claims Settlement Act 1998. This recognises Ngai Tahu's cultural, spiritual, historic and traditional association with the Mata Au.

The Mata-au is seen as a descendant of the creation traditions and represents the link between the cosmological world and present generations.

The Mata-au was part of a Mahika kai trail used by Otakou hapū. The tupuna had significant knowledge of the trails, locations of kai and other taonga, and ways to use the resources of the river in a proper and sustainable way. The river also represents the historic boundary line between Ngai Tahu and Ngati Mamoe. Overtime this boundary was overcome through strategic unions between whanau, hapu and iwi.

Te Runanga carry responsibilities of kaitiaki in relation to the Mata Au and wider area. The mauri of the River represents the essence that binds the physical and spiritual elements of all things together, generating and upholding life. Mauri is critical element of the spiritual relationship of Ngai Tahu Whanui with the river.

The Mata Au is ara tawhito, mahika kai and nohoaka, but these are not present within the Luggate catchment that would be affected by the proposed activity.

AREAS OF CULTURAL SIGNIFICANCE ON THE APPLICATION SITE

None of the ineligibility criteria identified in the Fast-track Approvals Bill are triggered by this proposal. The Queenstown Lakes District Council district plan maps do not identify any wāhi tūpuna within the area affected by the proposal. The Mata-au is identified as wāhi tūpuna and as a statutory acknowledgement area, the Mata-au is downstream of the proposed hydro scheme.

The Lake Mckay Hydro scheme would not have any direct adverse effects on the mauri of the Clutha River/Mata-au. The hydro scheme would affect Luggate Creek catchment (both the mainstem and the Aliceburn tributary), which are in turn tributaries of the Mata-au. As the scheme is run-of-river, the take is non-consumptive. The water removed is returned to resume its journey to the Mata-au. The use of the water to generate electricity does not physically affect the water.

The Site is not within a Tōpuni, these are public symbols of Ngai Tahu mana and Rangatira over prominent landscape features and conservation areas. There are six Tōpuni sites in Otago; Aoraki, Maukaatua Scenic reserve, Te Koroka, Matakaea, pikirakatahi and Tititea.

There have not been any archaeological sites recorded associated with Maori occupation within the proposal area. Discovery of previously unidentified archaeological sites would be managed by way of an Accidental discovery protocol.

Are there any Ngā Rohe Moana o Ngā Hapū o Ngāti Porou Act 2019 principles or provisions that are relevant to the project?

No

If yes, what are they?:

Are there any identified parcels of Māori land within the project area, marae, and identified wāhi tapu?

No

If yes, what are they?:

A search of Pātaka Whenua confirms there is no Māori land within the project area.

Is the project proposed on any land returned under a Treaty settlement or any identified Māori land described in the ineligibility criteria?

No

Has the applicant has secured the relevant landowners' consent?

Yes

Is the project proposed in any customary marine title area, protected customary rights area, or aquaculture settlement area declared under s 12 of the Māori Commercial Aquaculture Claims Settlement Act 2004 or identified within an individual iwi settlement?

No

If yes, what are they?:

Has there been an assessment of any effects of the activity on the exercise of a protected customary right?

No

If yes, please explain:

Upload your assessment if necessary:

No file uploaded

Section 5: Adverse effects

What are the anticipated and known adverse effects of the project on the environment?

Please describe:

EFFECTS ON ALLOCATION AND OTHER WATER USERS – The proposed water takes are non-consumptive with water being taken and returned to the Alice Burn and Luggate Creeks entirely. In the case of the Luggate Creek take the return occurs upstream of all water takes for other consumptive uses, while in the case of the Alice Burn the water is taken as part of the wider irrigation system for Lake McKay Station which the Applicant also owns and is upstream of other water takes. Water taken from the Alice Burn for hydro purposes, but not used for other consumptive uses (namely irrigation and drinking water) is returned to the water body.

EFFECTS ON INSTREAM FLOWS – Both takes are proposed to be managed by a take rate and residual flow condition to protect instream values between the take and return points. The potential effects of this have been assessed by an independent freshwater ecologist (and peer reviewed by Otago Regional Council's ecologist) which has concluded that the effects on instream ecological values will be minor.

EFFECTS ON FISH SPECIES– Within the Luggate Creek eDNA testing and NZFFD records confirm that there are no fish species occupying the stretch of water body affected by the take. The water is returned upstream of the stretch of the Luggate Creek where a stunted population of trout have been identified, likely due to an unauthorised translocation many decades ago. Due to the topography of the catchment and size of the fish the population holds no recreational fishing values. Within the Alice Burn there are no records of any fish species upstream or downstream of the intake location. There are two eDNA records indicating Brown Trout, Rainbow Trout and Koaro in close vicinity to the discharge location. The topography of the Alice Burn is such that there are likely natural fish barriers between the intake and discharge points. Fish near the discharge location have been found to be small and of no recreational value. It is considered that the proposal will not have more than minor effects on fish species.

EFFECTS ON MACROINVERTEBRATES – Some threatened invertebrates are known to occupy Luggate Creek above the proposed take point. However, this is outside the section of creek affected by the proposal therefore no effects on those species are anticipated. MCI scores for the Luggate Creek are 'good' based on current State of the Environment monitoring. The application proposes residual flows that are higher than those applied to other takes in the catchment which means this proposal will not affect the MCI scores. The nature of the water bodies is such that reduced flows between intake and discharge are unlikely to give rise to conditions that could induce periphyton proliferation. This is due to the steep topography resulting in highly turbulent water, and low nutrient inputs associated with the surrounding land use.

EFFECTS ON WETLANDS OR GROUNDWATER – There are no wetlands identified in the application area and no groundwater resources in close proximity to the application area. Therefore there are no anticipated effects on these matters.

EFFECTS OF DISCHARGES– The proposal will be water taken returned to the same catchment downstream. The discharges will be designed to avoid potential for flooding, erosion, land instability or sedimentation to arise at the discharge location. As the water being discharged is the water that has been taken there will be no adverse effects on water quality. In the case of the Luggate Creek the discharge will be to an unnamed tributary of the Luggate Creek mainstem due to the topography of the Luggate Creek at the necessary elevation and the fact that this area is within a Scenic Reserve. Discharge to the tributary avoids effects on the Scenic Reserve. The proposed discharge location is populated by crack willows which have resulted in degraded habitat that will not be compromised by the proposal. The Alice Burn discharge location has also been selected to ensure the effects of the discharge can be appropriately managed.

EFFECTS ON RECREATIONAL VALUES – The area of the water bodies proposed are either bounded by private land or effectively inaccessible due to topography. Whilst a small population of rainbow trout is known to exist below the Luggate Creek discharge point (and could potentially travel higher in the catchment) these fish are small due to the nature of the creek and of no sports fishing value. The residual flows proposed will provide adequate protection of stream values within the reach between the proposed takes and returns. Access for recreational purposes is similarly constrained in the Alice Burn with the steep topography rendering the affected stretch of water inaccessible. On this basis effects on recreational values are considered negligible.

EFFECTS ON NATURAL CHARACTER – the proposed residual flows will provide protection of natural character of the creeks. Most of the water body affected is steep and incised which will mean it will retain its normal behaviour with the residual flows proposed. The design of the intakes allow the creek to retain flow variability and character associated with that. The water takes are non-consumptive with all water ultimately being returned to the creeks. The activity will require the establishment of some new structures, including weirs, penstocks, holding tanks etc. The penstocks will mostly be underground and located within existing tracks which minimises their visibility and disturbance associated with construction. Other infrastructure such as generator sheds will be small scale, recessively coloured and generally screened by topography or only visible from such distant views as to not be discernible.

Minimal vegetation disturbance is required, and any disturbance will be offset by planting a corresponding number of plants in adjacent areas commensurate with those removed. This will ensure that the natural character is retained.

EFFECTS ON LANDSCAPE VALUES - The area affected by the proposal sits within an Outstanding Natural Landscape. The northern flanks of the Criffel and Pisa Ranges form the vast, mountainous and relatively natural southern book-end to the Upper Clutha Basin. These slopes have been extensively farmed for many decades but also support significant remnant native areas. The The Fallburn Reserve (Scenic Reserve) comprises a steep, bush clad valley and any views that are gained within it are particularly confined. Penstocks will generally be buried and therefore not visible. Generator sheds will be small, windowless, recessive in colour and have the appearance of a farm shed. Such a building would be permitted in this location if used for farming purposes rather than energy generation.

Earthworks will largely be within existing tracks with effects similar to permitted maintenance of these tracks. The tracks will be reinstated. Effects of earthwork will be a temporary disturbance which will be remedied once ground cover is reestablished.

Overall the landscape values of the ONL will continue to be protected if the proposal proceeds.

EFFECTS ON INDIGENOUS BIODIVERSITY – due to the nature of the proposed scheme effects on terrestrial ecology are assessed as minor. Establishment of the penstocks and associated buildings may require small and localised removal of vegetation associated with earthworks. Initial herpetological

surveys have been undertaken in both sub catchments which indicate the presence of herpetofauna (up to 4 indigenous lizard species within or adjacent to the Luggate Creek pipeline alignment, and the potential presence of up to 2 lizard species within or adjacent to the Alice Burn lower pipeline footprint). The survey report indicates that a Wildlife Act Authorisation will likely be required for parts of the pipeline works, however the proposed pipeline installation methodology will ensure appropriate avoidance or mitigation of potential effects on species present. Conditions to address this will be included in the application.

EFFECTS ON HERITAGE VALUES – The proposed Luggate Creek penstocks will utilise a portion of a historic water race. An archaeological assessment has concluded that an archaeological authority is required from Heritage New Zealand Pouhere Taonga for adaptive reuse of the water race. The assessment has also indicated that approval may also be needed from the Department of Conservation for potential effects to this heritage feature within the marginal strip, however this is yet to be confirmed via ongoing consultation with the Department.

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Section 6: National policy statements and national environmental standards

What is the general assessment of the project in relation to any relevant national policy statement (including the New Zealand Coastal Policy Statement) and national environmental standard?

Please write your answer here:

The Proposal is consistent with the relevant National Policy Statement as set out in the document attached.

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Section 7: Eligibility

Will access to the fast-track process enable the project to be processed in a more timely and cost-efficient way than under normal processes?

Yes

Please explain your answer here:

This proposal requires a range of approvals under 6 regimes. Approvals under 5 regimes can be obtained through this fast-track process. The Applicant's experience with similar developments is that it would be a 3-4 year process to obtain all the necessary approvals utilising the normal processes due to the need for RMA approvals to be obtained prior to seeking DoC concession and/or Wildlife Act approval. Applications for this proposal have been filed with the Regional Council in relation to water takes only and that process has already taken approximately 9 months from lodgement due to back and forth with Council and potentially affected parties. That process has not been able to resolve matters which is likely to result in a contested hearing process due to affected parties having differing views on the activity status of the applications. The applicant is also concerned about the potential for inconsistent conditions to be imposed on the various approvals. A single approval with a common suite of conditions would make implementing the conditions during construction and operation considerably simpler. Further to that this proposal is 'all or nothing'. Due to the significant costs associated with establishing the connection to the distribution network both parts of the scheme are necessary in order for the proposal to be viable.

What is the impact referring this project will have on the efficient operation of the fast-track process?

Please write your answer here:

This proposal is relatively* small and the Applicant is well advanced in the preparation of consent documentation. It expects that if added to the schedule it would be in a position to file application documents immediately. The nature of the application means there are no significant adverse effects and the effects arising are well understood and assessed with a high degree of confidence. In light of that it is considered that this application would aid the efficient operation of the fast-track process by being able to be processed relatively quickly and easily alongside other larger and more complicated proposals.

*relative to the scale of other projects that the Applicant is aware of seeking to be added to the schedule.

Has the project been identified as a priority project in a:

Central government plan or strategy

Please explain your answer here:

NATIONAL

New Zealand's First Emissions Reduction Plan:

Government has adopted the first Emissions Reduction Plan under the Climate Change Response Act, which is intended to ensure New Zealand achieves its Emissions Reduction targets. The Government's 2050 vision for energy and industry is for New Zealand to have a highly renewable, sustainable and efficient energy system supporting a low-emissions economy. The Government Plan identifies that New Zealand needs to move away from fossil fuels and shift towards renewable energy generation.

In the ERP, the Government identified five focus areas to achieve a low emissions energy system. Focus area 2 is most relevant to this project: ensure the

electricity system is ready to meet future needs. To achieve this, the ERP identifies actions:

Action 11.2.1 – Accelerate development of new renewable electricity generation across the economy. Sub-actions include supporting renewable energy in communities. This project aligns with that action.

Action 11.2.2 – Ensure the electricity system and market can support high levels of renewables. A sub action is to support the electricity market to transition to 100 percent renewable generation. This project is consistent with the Action.

Lake McKay is consistent with the aims of the ERP to allow for energy to be:

- a. Accessible and affordable and support the wellbeing of all New Zealanders
- b. Secure, reliable and resilient
- c. Support economic development and an equitable transition into a low emissions economy.

[Minister for Climate Change and Ministry for the Environment Aotearoa New Zealand's First Emissions Reduction Plan (ME 1639, May 2022) at 203.]

Strengthening National Direction on Renewable Electricity Generation and Electricity Transmission – A summary of proposed changes (April 2023): This MBIE produced document notes that 'Renewable electricity generation is critical to our future wellbeing and prosperity'. It further notes that "rapid and efficient investment in renewable electricity and the national grid is needed for New Zealand to reach its emissions reduction targets and renewable electricity goals. Current national direction for renewable electricity generation and electricity transmission was developed before emissions reduction targets were incorporated into New Zealand law and are no longer fit for purpose to support the pace and scale of development that is required." The changes proposed aimed to strengthen national direction on renewable energy generation. This project is consistent with those aims.

New Zealand Energy Efficiency and Conservation Strategy 2017-2022: this document sets the overarching policy direction for government support and intervention for promoting energy efficiency, energy conservation and the use of renewable sources of energy. It encourages businesses, individuals, households, community institutions and public sector agencies to take actions to help unlock renewable energy and energy efficiency potential, to the benefit of all New Zealanders. Its priority areas include innovative and efficient use of electricity. The strategy notes that converting from fossil fuels to renewable energy unlocks further emissions reductions and reduces dependence on energy imports. The Lake McKay hydro scheme proposal is consistent with this strategy.

Central government plan for the Energy and Industry sector: The Government's 2050 vision for energy and industry is to have a highly renewable, sustainable, and efficient energy system that is accessible and affordable, secure and reliable, and supports New Zealanders' wellbeing. It has committed to reaching net zero for long-lived gases by 2050, set a target that 50% of total energy consumption will come from renewable sources by 2035, and has an aspirational target of 100% renewable electricity by 2030.

In August 2023 MBIE put out a consultation document 'Measures for Transition to an Expanded and Highly Renewable Electricity System'. The document notes the Government's commitment to reaching net zero for all greenhouse gas emissions (excluding biogenic methane) by 2050. It also acknowledges that "while New Zealand already has a high share of renewable electricity, we need to build substantially more by 2050 to enable electrification" (page 7). This project aligns with these aims.

LOCAL

Otago Regional Council: The ORC is working to better understand and reduce the impacts of climate change. The ORC is a signatory of the Local Government Leaders Climate Change Declaration 2017, this declaration includes council commitments.

1. For our part we commit to:

- c. support the use of renewable energy and uptake of electric vehicles.

This proposal is consistent with the ORC's commitments in the 2017 Declaration.

Proposed Otago Regional Policy Statement 2021

Queenstown Lakes District Council has adopted the Climate and Biodiversity Plan 2022-2025 including action to remove barriers to small and community scale renewable energy solutions. QLDC has also developed and is implementing a Regenerative Tourism Plan which commits the District to achieving a Carbon Zero Tourism Sector by 2030. This commitment will require more aggressive transition to low emissions technology and will inevitably drive higher demand for renewable energy supply. Establishment of renewable energy generation within the District will support this sector Plan.

OTHER:

New Zealand National Party and New Zealand First Coalition Agreement:

11H. Deliver Net Zero by 2050 including by doubling New Zealand's renewable electricity and supporting new technology to reduce agricultural emissions. Amend the Resource Management Act 1991 to make it easier to consent new infrastructure including renewable energy ... (Page 5).

New Zealand National Party and Act New Zealand Coalition Agreement: Amend the Resource Management Act 1991 to make it easier to consent new infrastructure including renewable energy ... (Page 5).

Will the project deliver regionally or nationally significant infrastructure?

National significant infrastructure

Please explain your answer here:

Yes, Renewable Electricity Generation is identified as a matter of national significance under the National Policy Statement for Renewable Electricity Generation 2011. That document explicitly acknowledges contribution of REG, regardless of scale, to addressing the effects of climate change, and the wellbeing of communities. Small and Community Scale REG has an important role to play in increasing the security of supply at a local/regional level and resilience of the electricity system to adverse weather events.

REG activities where they connect to either the National Grid or the distribution network are also identified in the Partially operative Regional Policy Statement for Otago 2019 as national and regionally significant. Under the Proposed Regional Policy Statement for Otago 2021 (for which the decision has

just issued) renewable electricity generation that connects with the local distribution network is considered regionally significant infrastructure. At a project specific level it is noted that the Upper Clutha Basin is currently experiencing significant growth which is placing increasing pressure on the electricity network. Currently the nearest Grid Exit Point is at Cromwell with electricity supply into the basin being provided by one sub-transmission line with n-1 redundancy. This creates some vulnerabilities for the network and electricity supply resilience for the Upper Clutha Basin. On this basis a source of electricity generation in close proximity to the population centres of the Upper Clutha has benefits in terms of lifeline utility resilience in the event of a natural disaster.

Will the project:

Please explain your answer here:

No

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

Yes. Construction of the project will roughly cost **s 9(2)(b)(ii)**. Once construction is complete, the project will contribute \$2m into the local economy per annum. The project will support 1 to 1.5 in full time equivalent roles on an ongoing basis.

The Lake McKay hydro project will have positive effects on the local economy through employment opportunities and procurement of local services. The project will result in the employment of staff, contractors, suppliers and provision of local services once operational.

Will the project support primary industries, including aquaculture?

Yes

Please explain your answer here:

This project supports the ongoing viability of Lake McKay Sheep and Beef Station.

Will the project support development of natural resources, including minerals and petroleum?

Yes

Please explain your answer here:

The proposal will utilise the flow of Luggate Creek and Alice Burn to generate electricity. Luggate Creek catchment has good flows which are available year-round making them highly suitable for hydrogeneration. Neither take affects existing water users but rather enables the same water to be utilised for another purpose enhancing its contribution to social and economic wellbeing of the community. In the case of the Alice Burn part of the scheme the proposal leverages existing intake infrastructure which results in efficiencies gained from that existing infrastructure. The Scheme represents a highly sustainable use and development of resources.

Will the project support climate change mitigation, including the reduction or removal of greenhouse gas emissions?

Yes

Please explain your answer here:

The proposal will contribute another source of renewable electricity generation to the electricity network. The New Zealand Emissions Reduction Plan (ERP) seeks to increase the proportion of electricity generated from renewable sources. The New Zealand Government, through the ERP, committed to an aspirational target of 100% renewable energy by 2030. Achieving this target will require significant expansion of renewable energy generation sources. Work in support of the Emissions Reduction Plan indicates between 400 and 500MW of new renewable electricity needs to be constructed annually to meet the Net Carbon Zero targets (which requires 2.5x more new generation being constructed annually has occurred between 1990-2020). The Lake McKay project can assist in achieving this target. Projects such as the proposed are particularly useful as they connect directly to the distribution network which results in fewer transmission losses.

The Upper Clutha area is a relatively populated area with good sub-transmission infrastructure located nearby. This makes it relatively straightforward to get the electricity produced by the project into the distribution network and distributed locally.

The project scheme requires a non-consumptive take of water, and all abstracted water taken from the creek will be returned to the relevant waterbodies. This allows the water to be available for other water users and does not affect overall allocation within the catchment - this supports the climate change resilience of the other water users. The project will add another renewable energy generation source to Otago, strengthening the resilience of the electricity supply network and reducing New Zealand's greenhouse gas emissions.

Will the project support adaptation, resilience, and recovery from natural hazards?

Yes

Please explain your answer here:

The Upper Clutha electricity network has some inherent vulnerabilities due to nearest Grid Exit Point being at Cromwell, some 60km away. This scheme will provide a meaningful supply of electricity generation capacity in closer proximity to the Upper Clutha population centers that can support lifeline utility operation during natural hazard events if the Cromwell to Wanaka sub-transmission line were to be affected.

Will the project address significant environmental issues?

Yes

Please explain your answer here:

Climate Change is a significant environmental Issue. Queenstown Lakes District Council declared a climate and ecological emergency on 27 June 2019. In the subsequent QLDC Climate and Biodiversity Plan (June 2022) on page 13, renewable energy was identified as a mitigation action to reduce carbon emissions. This is also consistent with the National Emissions Reduction Plan which seeks to achieve 100% renewable energy generation by 2030. Our atmosphere and climate 2023. New Zealand's Environmental Reporting Series. Ministry for the Environment. (October 2023) highlights pressures brought by climate change, which are a significant environmental issue. On page 11 these include:

- increasing greenhouse gases from human activity are the most significant driver of climate change since pre-industrial times.
- NZ's gross emissions have increased since 1990 and have remained relatively stable since 2006.

NZ still supplements electricity generation with coal and gas generation (EECA, 2023).

Therefore, this proposal will reduce reliance on those fuel sources, diversify Otago's energy generation and help to reduce the extent of climate change impacts.

Is the project consistent with local or regional planning documents, including spatial strategies?

Yes

Please explain your answer here:

OPERATIVE OTAGO REGIONAL POLICY STATEMENT 2019

The operative Otago Regional Policy Statement 2019 contains a number of provisions that are relevant to the proposal. These include policies relating to the social, cultural, and economic wellbeing and resilience of the region's communities (Policies 1.1.1, 1.1.2), achieving integrated management of Otago's natural resources (Policy 1.2.1), taking into account and/or supporting Te Tiriti o Waitangi and Kai Tahu principles and values (Policies 2.1.2 and 2.2.1), and safeguarding the life-supporting capacity of freshwater (Policy 3.1.1). The proposal is generally consistent with these policies.

Of particular relevance is Policy 3.1.3, which requires management of the allocation and use of fresh water. In relation to this policy, the proposal seeks the efficient and sustainable use of water for the development of regionally and nationally significant infrastructure, which will have positive social and economic benefits within the community.

Policies 4.3.2, 4.4.1 and 4.4.2 require councils to recognise nationally and regionally significant renewable electricity generation infrastructure, and promote development of this infrastructure. The proposal gives effect to these policies.

With regards to ORPS Policy 5.4.2, the proposal presents an adaptive management approach through the provision of residual flow conditions, instream residual flow monitoring, and a remote, automated system which will be critical in avoiding adverse effects on the watercourses.

THE PROPOSED OTAGO REGIONAL POLICY STATEMENT 2021

The proposed Otago Regional Policy Statement (pORPS) recently underwent a hearings process. The Otago Regional Council notified its decision on pORPS on 30 March 2024. The Energy Chapter (page 176) identifies Otago's "clear preference for renewable electricity generation activities contributing to meeting New Zealand's national target for renewable electricity generation." The Chapter provides strong support for renewable energy generation in Otago.

Objective EIT-EN-O1 – Energy and social and economic well-being: The health and wellbeing of Otago's communities and economy are supported by renewable energy generation within the region that is safe, secure and resilient.

Objective EIT-EN-O2 – Renewable electricity generation: The generation capacity of renewable electricity generation activities in Otago

1. Is protected and maintained and, where appropriate, increased, and
2. Contributes to meeting New Zealand's national target for renewable electricity generation.

Policy EIT-EN-P8 – Small and community scale distributed electricity generation – provide for small and community scale distributed electricity generation activities that increase the local community's resilience and security of energy supply.

The anticipated environmental results section for the energy chapter goes on at EIT-EN-AER1 (Page 181) the proportion of electricity generated by renewable energy generation activities (including small and community scale distributed electricity generation) in Otago increases over time.

Lake McKay hydro scheme is consistent with pORPS.

OTAGO REGIONAL PLAN WATER

The Otago Regional Plan Water seeks to manage activities involving surface water, giving priority to avoiding effects in preference to remedying or mitigating. The Plan identifies the natural values, water supply values, historical values, cultural values to be addressed. The proposed hydro generation take is not assessed as having more than minor effects on any of the identified values. The proposed activity is assessed as being consistent with the Regional Plan.

QUEENSTOWN DISTRICT PLAN

The Strategic Directions for the District Plan seek to achieve a prosperous, resilient and equitable economy, diversification of the District's economic base and ensuring that community needs are met by infrastructure.

With respect to Climate Change the Plan directs economic activity to adapt and recognize opportunities, and expresses a preference for establishing new renewable energy generation to meet increasing demand for electricity. The Plan recognises the importance of maintaining and enhancing the security of electricity supply at a local, regional and national level by diversifying the type and location of supply, and supporting community resilience through local

energy resource development.

The application site is within an Outstanding Natural Landscape in the Queenstown Plan. This requires the landscape and natural character values to be protected. The landscape assessment obtained by the Applicant confirms that this can be achieved. The Plan also seeks to ensure that indigenous biodiversity is maintained or enhanced. Through construction methodology and proposed conditions these requirements can be achieved by the proposal.

The proposed activity is consistent with the District Plan.

Anything else?

Please write your answer here:

Does the project includes an activity which would make it ineligible?

No

If yes, please explain:

Section 8: Climate change and natural hazards

Will the project be affected by climate change and natural hazards?

Yes

If yes, please explain:

The Past, Present and Future Climate of Central Otago report prepared by Bodeker Scientific for the Central Otago District Council (August 2017) identified that year to year variability in the volume of snow accumulated in snowpack creates uncertainty in the energy sector, especially with hydropower generation.

The report found that more winter precipitation is anticipated. Resulting in less accumulated storage of water in snow. The long-term changes in snowpack volume are also sensitive to climate change. It is expected that seasonal snowpack volumes will decrease due to a warming climate. The reduction of snow in storage and warmer temperatures means there will be an increase in streamflow during the winter and reduction of streamflow in the summer months out to 2090. During the life of the permits proposed by this application the changes will be within natural variability.

The risk of flood can be mitigated. Flows in excess of the residual and consented abstraction rate can easily flow over the proposed structures. Therefore, the climate change induced increased flood risk would not have a significant adverse effect on the proposal.

Section 9: Track record

Please add a summary of all compliance and/or enforcement actions taken against the applicant by any entity with enforcement powers under the Acts referred to in the Bill, and the outcome of those actions.

Please write your answer here:

Nil

Load your file here:

No file uploaded

Declaration

Do you acknowledge your submission will be published on environment.govt.nz if required

Yes

By typing your name in the field below you are electronically signing this application form and certifying the information given in this application is true and correct.

Please write your name here:

Bridget Irving

Important notes