

Response ID ANON-URZ4-5FM2-F

Submitted to Fast-track approval applications
Submitted on 2024-05-01 14:23:19

Submitter details

Is this application for section 2a or 2b?

2A

1 Submitter name

Individual or organisation name:
Manawa Energy Limited

2 Contact person

Contact person name:
Lisa Mead

3 What is your job title

Job title:
Environmental Consenting Manager

4 What is your contact email address?

Email:
§ 9(2)(a)

5 What is your phone number?

Phone number:
§ 9(2)(a)

6 What is your postal address?

Postal address:

Manawa Energy Limited
Private Bag 12055
Tauranga Mail Centre
Tauranga 3143

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

No

Organisation:

Contact person:

Phone number:

Email address:

Job title:

Please enter your service address:

Section 1: Project location

Site address or location

Add the address or describe the location:

The Wheao Hydro-Electric Power Scheme is located in the Kaingaora Forest within the Rangitāiki River Catchment, being approximately 44km east of Taupō and 21km southwest of Murupara.

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Wheao HEPS Map.png was uploaded

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

Yes

upload file:

Wheao HEPS - Records of Title.pdf was uploaded

Who are the registered legal land owner(s)?

Please write your answer here:

The Crown

CNI Iwi Holdings Limited SA55B/501, 507549

Department of Conservation 484186

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 Wheao Hydro-Electric Power Scheme is existing. All current titles associated with the Wheao Hydro-Electric Power Scheme include operational easements.

Section 2: Project details

What is the project name?

Please write your answer here:

Wheao Hydro-Electric Power Scheme Re-Consenting

What is the project summary?

Please write your answer here:

The Wheao Hydro-Electric Power Scheme is located within the Rangitāiki River Catchment and generates renewable electricity by taking, diverting and damming water from the Rangitāiki and Wheao Rivers through a series of tunnels and canals to the Flaxy Power Station and the Wheao Power Station. It has an installed generation capacity of 26 MW and generates approximately 111GWh of renewable electricity per annum.

What are the project details?

Please write your answer here:

The purpose of the Wheao Hydro-Electric Power Scheme is to maintain the renewable generation of electricity in the Bay of Plenty Region and enhance the energy security of the region and country, while diversifying New Zealand's energy portfolio. The Wheao Hydro-Electric Power Scheme is located in the Kaingaora Forest within the Rangitāiki River Catchment, being approximately 44km east of Taupō and 21km southwest of Murupara.

It has an installed generation capacity of 26 MW and generates approximately 111GWh - electricity to power nearly 17,000 households of renewable electricity per annum. Wheao connects to the electricity distribution network at Rotorua. . The Scheme makes a significant contribution to the Bay of Plenty's security of supply as well as New Zealand's security of supply, while materially contributing to greenhouse gas emission reductions of approximately 41,000 tCO₂-e (for gas) or 105,000 tCO₂-e (for coal). The Scheme diverts water from the Rangitāiki and Wheao Rivers, via a series of connected tunnels and canals to the Flaxy Power Station and the Wheao Power station prior to discharging the water back to the Wheao River. The Wheao Hydro-Electric Power Scheme has been in operation since 1982 and currently generates renewable electricity by:

- The damming, diverting and taking of water from the Wheao River via a diversion weir and intake structure;
- The damming and use of water in Flaxy Creek;
- The damming, diverting and taking of water from the Rangitāiki River via a diversion weir and intake structure;
- The discharge of water from Flaxy Lake, via the Flaxy Power Station to the Rangitāiki Canal; and
- The discharge of water from the Rangitāiki Canal, via the Wheao Power Station, to the Wheao River.

The operating regime for the Wheao Hydro-Electric Power Scheme will remain largely the same as currently authorised under Manawa Energy's current

resource consents, with the following exceptions:

- The implementation of a residual flow in the Wheao River downstream of the Wheao Weir (where none currently exists);
- The alteration to the sluicing regime in the Wheao Weir, as well as the operation of sluicing events, in order to improve sediment mobilisation down the Wheao River; and
- Clarification of what constitutes 'normal operating conditions' with respect to the provision of wither a 6m³/s or 2m³/s flow in the Wheao River downstream of the Wheao Power Station.

The project involves the following activities which require resource consent as a controlled activity pursuant to the Bay of Plenty Regional Natural Resources Plan:

- The discharge of water to water;
- Discharges of contaminants to water;
- The take and use of water (including non-consumptive use);
- The damming and diversion of water; and
- The use of structures in the bed of a stream or river.

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

Please write your answer here:

N/A – the Wheao Hydro-Electric Power Scheme is existing infrastructure.

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

Please write your answer here:

Resource Management Act 1991.

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

Please write your answer here:

Bay of Plenty Regional Council.

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

Please write your answer here:

A resource consent application to the Bay of Plenty Regional Council for the re-consenting of the Wheao Hydro-Electric Power Scheme was lodged in June 2023. The application is currently being reviewed by the Council – no further information requests have been received, and notification of the application has not yet occurred. A decision on the application is yet to be made.

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

No

Please explain your answer here:

N/A

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

Please write your answer here:

The Wheao Hydro-Electric Power Scheme consists of existing infrastructure. No construction activities are anticipated to occur if the consent is granted.

Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

Bay of Plenty Regional Council
Taupō District Council
Ngāti Manawa
Ngāti Whare
Ngāti Hineuru
Fish and Game
Department of Conservation

CNI Iwi Holdings 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:

Manawa Energy commenced engagement with mana whenua and other iwi authorities who have interests in the Rangitāiki River Catchment in 2020. Since then, Manawa Energy has engaged with mana whenua through individual site visits and the provision of draft technical assessments. This engagement has been ongoing. Manawa Energy understands that the Wheao Hydro-Electric Power Scheme is principally located in the rohe of Ngāti Manawa, Ngāti Whare and Ngāti Hineuru. Consultation and engagement with Mana Whenua is ongoing. The key issues raised by mana whenua through consultation relate to fish passage, residual flows and the mixing of waters.

Manawa Energy has also engaged with the Department of Conservation and Fish & Game, who were both provided with the AEE and technical assessments but have not yet provided substantive feedback. The key concerns from both were fish passage and effects of sluicing both of which Manawa Energy has proposed management plans going forward.

Manawa Energy has met with representatives of CNI Holdings Limited (CNI) who wish to be informed, but deferred detailed engagement to mana whenua.

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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:

The Wheao Hydro-Electric Power Scheme is existing and therefore no processes under the Public Works Act 1981 are necessary for the project.

Section 4: Iwi authorities and Treaty settlements

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

Please write your answer here:

The Ngāti Manawa and Ngāti Whare Treaty settlements apply to the geographical location of the project including the following statutory acknowledgements:

- Rangitāiki River (including both upstream and downstream of the Rangitāiki Weir) – Ngāti Manawa and Ngāti Hineuru;
- Wheao River (including from the Wheao Weir to the confluence with the Rangitāiki River) – Ngāti Manawa and Ngāti Hineuru; and
- Whirinaki Te Pua-a-Tāne Conservation Park (adjacent to the Wheao River, including along the reach surrounding the Wheao Weir) – Ngāti Whare and Ngāti Hineuru.

The Ngāti Manawa Claims Settlement Act 2012 provides that the Rangitāiki and Wheao Rivers are taonga of great significance to Ngāti Manawa. They have responsibilities to protect the mana and mauri of the rivers and to exercise their mana whakahaere in accordance with their long established tikanga. The Ngāti Manawa Claims Settlement Act 2012 establishes the Rangitāiki River Forum, whose purpose is to protect and enhance the environmental, cultural, and spiritual health and wellbeing of the Rangitāiki River and its resources for the benefit of present and future generations.

The Hineuru Claims Settlement Act 2016 provides Ngāti Hineuru with one permanent seat on the Rangitāiki River Forum (which is the same forum established under the Ngāti Manawa Claims Settlement Act 2012).

The Ngāti Whare Claims Settlement Act 2012 provides that Ngāti Whare with joint governance of the Whirinaki Te Pua-a-Tāne Conservation Park through the development and joint approval of a conservation management plan for the park.

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?:

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:

The Regional Natural Resources Plan sets out the matters of control relating to the project, which guide the decision maker. Manawa Energy has obtained full expert assessments relating to the matters of control, with the full list of those assessments as follows:

- Assessment of Environmental Effects (AEE) – Manawa Energy
- Statutory Planning Assessment – Mitchell Daysh
- Hydrology Assessment – Tonkin & Taylor
- Hydrogeology Assessment - Pattle Delamore Partners Limited
- Sediment Assessment – Tonkin & Taylor
- Aquatic Ecology Assessment – Dr Greg Ryder;
- Whio Blue Duck Assessment – Wildlife Management Associated Limited;
- Natural Character, Landscape and Visual Amenity Assessment – Boffa Miskell
- Recreation Assessment – Rob Greenaway and Associates
- Dam Safety Report – Riley Consultants

The following descriptions are high level summaries of the effects assessed, with particular focus on the Rangitāiki and Wheao Rivers.

Hydrological Effects – Tonkin & Taylor (2023) considers that the hydrological operation of the Wheao Hydro-Electric Power Scheme will predominately remain unchanged, with the exception of the proposed refinement of the sediment sluicing regime at the Wheao Weir and the provision of a permanent residual flow in the Wheao Weir and River.

Hydrogeological Effects – The hydrogeological assessment prepared by PDP (2022) considers that the damming and diversion of the Rangitāiki River, Wheao River and Flaxy Creek is unlikely to be having any noticeable impact on groundwater.

Sedimentation, Erosion and River Hydraulic Effects - The sediment assessment prepared by Tonkin & Taylor (2023) assesses the effects of the Wheao Hydro-Electric Power Scheme on sediment and erosion processes within the Rangitāiki River Catchment. Tonkin & Taylor conclude that sediment discharges annually from sluicing, and during high flow periods, at the Rangitāiki Weir and is similar to the annual sediment loads arriving at the weir, and unlikely to result in any observable erosive effects or aggradation effects. On the Wheao River, sediment dynamics below the Wheao Weir may be altered by the current infrequent sluicing regime at the weir and lack of residual flow below the Wheao Weir. Mitigation measures for a revised sluicing regime are proposed including a residual flow.

Aquatic Ecology Effects – The aquatic ecology assessment by Ryder (2023) assesses the effects of the Wheao Hydro-Electric Power Scheme on the aquatic ecology of the Rangitāiki River, Wheao River and Flaxy Creek. Key conclusions by Ryder (2023) for each section of the Scheme include:

- Rangitāiki River – The residual flow at the Rangitāiki Weir may provide less than optimum habitat for some taxa, but it is considered unlikely that this would strongly influence the benthic invertebrate community make-up. Any increase in the residual flow at the Rangitāiki Weir would provide a small improvement in trout habitat but decrease suitable tuna habitat. As such, the existing residual flow is considered appropriate and should not be changed. Water temperature in the Rangitāiki River below the Rangitāiki Weir increases in short-term periods but not to a level that threatens the health of tuna (but they may limit trout feeding). Some sensitive

invertebrate taxa, such as mayflies and stoneflies, may also be affected by warmer temperatures.

- Wheao River – There is a dominance of soft sediment between the Wheao Weir and Waione Stream confluence (largely due to sluicing at the Wheao Weir), which restricts algae growth. It is likely that fine sediment transport is affecting invertebrate community health in the Wheao River downstream of the Wheao Weir. Water quality and temperature are considered to be suitable for fish and invertebrate species, and for recreation and food collection. The shallow and slow flows together with a fine sediment bed below the Wheao Weir are not suitable to support large fish.

Fish Passage Effects – The aquatic ecology assessment by Ryder (2023) also assessed the effects of the Wheao Hydro-Electric Power Scheme on fish passage within the Rangitāiki Catchment. Ryder identified a number of structures and features which would present potential barriers to upstream fish passage, and mortality risk for any fish that are able to enter the Flaxy Power Station penstocks (with the potential exception of the smallest fish) and the Wheao Power Station penstocks. Manawa Energy is proposing the following mitigation measures:

- The provision of a wetted face over the concrete structures of the Rangitāiki and Wheao Weirs, or the provision of a physical conduit structure; and

- A trap and transfer programme should be undertaken in the Rangitāiki Canal and Flaxy Lake to transfer adult migrating tuna out of the Wheao Hydro-Electric Power Scheme before they encounter the Flaxy and Wheao Power Stations.

Whio Effects – Wildlife Management (2023) has undertaken an assessment of the actual and potential effects of the Wheao Hydro-Electric Power Scheme on Whio (blue duck). Wildlife Management consider that whilst the operation, use and maintenance of the Wheao Hydro-Electric Power Scheme has resulted in the loss of Whio habitat in the 1 km reach between the Wheao River and the Waione Stream confluence the resulting reduction in downstream flows has potentially enhanced Whio habitat suitability in the 5-6 km reach between the Waione Stream confluence and the Wheao Power Station. Overall, a net benefit in terms of Whio habitat in the Wheao River is provided.

Terrestrial Ecology Effects – The Wheao Hydro-Electric Power Scheme is located within, and surrounded by, a number of areas and features that are recognised as having high terrestrial ecological value. That said, Manawa Energy are not proposing any changes to the footprint of the Wheao Hydro-Electric Power Scheme, such that there will be no physical disturbance to any areas of significant indigenous vegetation or significant habitats of indigenous (terrestrial) fauna.

Natural Character, Landscape and Visual Amenity Effects – As detailed in the natural character, landscape and visual amenity assessment by Boffa Miskell (2023), the various components of the Wheao Hydro-Electric Power Scheme have been in place for over 40 years and have become a recognised part of the local landscape. Boffa Miskell (2023) considers that the primary impact of the Wheao Hydro-Electric Power Scheme on natural character is the reduced flows in the Rangitāiki and Wheao Rivers and the damming of Flaxy Creek, and assesses low to moderate adverse effects on existing natural character values, largely from the weirs, lakes and intake structures and associated reduced water flows. The Scheme will have no effect on the natural character values of the Rangitāiki and Wheao Rivers upstream of the respective weirs.

In the vicinity of the Rangitāiki Weir, landscape and visual amenity effects are considered low. In the vicinity of the Wheao Weir landscape and visual amenity effects are considered low to moderate, with the majority of the components of the Scheme being of a small scale relative to the gorge vegetation and vegetation surrounds.

Cultural Effects – the continued operation, use and maintenance of the Wheao Hydro-Electric Power Scheme has potential adverse effects on the:

- Relationship of tangata whenua and their culture and traditions with the site and any wāhi tapu or other taonga that may be in the areas surrounding the Scheme that are affected by the activity;
- and
- Ability of tangata whenua to exercise their kaitiaki role in respect of any wāhi tapu or other taonga that may be in the areas surrounding the Scheme that are affected by the activity.

The diversion of water from the Rangitāiki River to the Wheao River adversely affects the mauri of the Rangitāiki River. Mana whenua are concerned with the impacts of the passage of and the effects of sluicing on tuna. Concerns also arise from the changes in water quality and flows as a result of the mixing of waters.

Recreation Effects – Rob Greenway & Associates (2023) has prepared a recreation assessment that considers how the Wheao Hydro-Electric Power Scheme potentially impacts on existing recreation values in the Rangitāiki River Catchment. The Scheme is considered to have moderate effects on angling opportunities in the Wheao River downstream of the Wheao Power Station, however, has retained a regionally significant angling opportunity. The higher river flows associated with the Scheme have some advantages for white-water activities on the Rangitāiki River. Effects on recreation related to trout habitat, water quality and clarity in the Rangitāiki River downstream of the Wheao River confluence are considered to be minor.

Dam Safety Effects - A Dam Safety Report has been prepared by Riley Consultants (2023). The report concludes that various structures comprising the Wheao Hydro-Electric Power Scheme are being appropriately managed with a long-term approach to ensure that the risk of dam failure, land stability and flooding is minimised.

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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 New Zealand Coastal Policy Statement is not considered relevant as the Scheme is not located in the coastal environment. The relevant national policy statements and national environmental standards are:

- National Policy Statement for Renewable Electricity Generation (NPSREG)
- National Policy Statement for Freshwater Management (NPSFM)
- National Environmental Standards for Freshwater (NESF)

NPSREG – the NPSREG seeks to enable the sustainable management of renewable energy generation under the RMA. As such the project is entirely consistent with the objectives and policies of the NPSREG, with the following noted in particular:

- The objective to provide for the development and operation of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to levels that meet or exceed the Government's national target for renewable electricity generation.
- Policy A of the NPSREG recognises the benefits associated with renewable electricity generation activities, with the listed benefits in the policy being non-exclusive.
- Policy B requiring decision-makers to have particular regard to the practical implications of achieving the national target for electricity generated from renewable energy sources.
- Policies C1 and C2 requiring decision makers to have particular regard to the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable energy generation activities.

NPSFM – the fundamental concept of the NPSFM encompasses Te Mana o Te Wai which refers to the fundamental importance of water and recognises that protecting the health of freshwater will protect the health and wellbeing of the wider environment. The use of water for electricity generation is considered to fall within the second priority articulated in the objective of the NPSFM - being managing natural and physical resources for the health needs of people.

The NPSFM includes an effects management hierarchy which requires all adverse effects of a proposal to be analysed and addressed through a number of different actions. Expert assessments obtained by Manawa have confirmed that all adverse effects associated with the Wheao Hydro-Electric Power Scheme re-consenting have been remedied and mitigated, without the need to propose any offsetting and compensation, meaning the hierarchy has been complied with.

More broadly, the NPSFM is relevant to fish passage, residual flows, water quality, the management of adverse effects on aquatic ecosystems, and the management of the effects of the Scheme on the relationship of tangata whenua with the site and waterbodies. Based on the expert assessments obtained, and the engagement with mana whenua to date, it is considered that the continued operation, use and maintenance of the Scheme can occur in a manner that is consistent with the NPSFM.

NESF – the NESF does not impose any additional consent requirements in relation to the re-consenting of the Scheme, as it does not apply to existing structures (nor are relevant structures classified as 'weirs' for the purpose of the NESF), and the take, use, damming, diversion or discharge of water for the operation or maintenance of specified infrastructure is provided for as a permitted activity.

NPSIB - The National Policy Statement on Indigenous Biodiversity does not apply to the Kaimai Hydro-Electric Power Scheme as clause 1.3(3) of the NPS states that "nothing in this National Policy Statement applies to the development, operation, maintenance or upgrade of renewable electricity generation assets and activities and electricity transmission network assets and activities. For the avoidance of doubt, renewable electricity generation assets and activities, and electricity transmission network assets and activities, are not "specified infrastructure" for the purposes of this National Policy Statement."

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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:

The Fast-track process allows for time savings of up to three to four years and millions of dollars in administrative/RMA costs from expanded council processing, regional council hearings and Environment Court appeals for consents that cannot be declined. Additionally, decisions often seeks to create a 'compromise' whereby shorter term durations, higher minimum flows and expensive mitigation are set to appease interested parties. These types of restrictions have the potential to result in a significant loss of energy production. Manawa's experience is that the normal RMA process for re-consenting is lengthy and difficult. Re-consenting processes are taking three plus years and resulting in more complex conditions. This has a cost in terms of process costs, compliance costs, and in extreme cases the risk of lost generation.

With respect to timeframes, Manawa's experience includes the following re-consenting examples:

- Patea Hydro-Electric Power Scheme, Taranaki – application lodged in early 2007 and consents granted in 2010 following an Environment Court mediation process.
- Matahina Hydro-Electric Power Scheme, Bay of Plenty – application lodged 2009 and consents granted in 2014 following four Environment Court mediations.
- Otago Water Races (Beaumont, Crystals, Black Rock, Shepherds) – application lodged in 2020 and granted in 2023 – but for a 6 year duration only – consents expire in 2029.
- Mangorei Hydro-Electric Power Scheme – application lodged in November 2020. As at May 2024, Manawa awaits a final response from Council on the second round of further information requests.
- Motukawa Hydro-Electric Power Scheme – application lodged in November 2021. As at May 2024, Manawa awaits a final response from Council on the second round of further information requests.

With respect to the costs of the process, Manawa's experience is that the processes run from \$ [redacted] to in excess of \$ [redacted] for the more complex processes.

These difficulties are recognised in the National policy document Electrify NZ, which notes that re-consenting for existing generation assets has become unnecessarily difficult.

These costs and delays are particularly frustrating in the case of the Wheao Hydro-Electric Power Scheme, which is controlled activity. This means that consent cannot be declined. However, interested parties often seek to limit the duration to a short time period such as 10 years, which means that consent will need to be applied for again in less than 10 years' time. Given the time and cost involved to obtain consent in the first place, a short consent duration (i.e. less than the maximum duration under the RMA of 35 years) is a significant concern for Manawa Energy. The Wheao HEPS is an inter-generational asset that requires constant investment and maintenance appropriate with long-life assets. A shorter-term consent puts this investment at risk. The fast-track process offers much more certainty that the project will be consented in a timely manner with more certainty of outcome.

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

Please write your answer here:

This project is ready to be fast-tracked as the necessary expert assessments and an Assessment of Environmental Effects have been prepared. If the project is listed, an application could be lodged with the EPA within one month of the Act becoming law. Therefore, referring this project will demonstrate the efficient operation of the fast-track process.

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

Other

Please explain your answer here:

While the Wheao Hydro-Electric Power Scheme itself has not been specifically identified, the National policy document Electrify NZ notes that re-consenting for existing generation assets has become unnecessarily difficult. Listing this re-consenting project for fast-tracking would be consistent with that policy.

Will the project deliver regionally or nationally significant infrastructure?

National significant infrastructure

Please explain your answer here:

The Wheao Hydro-Electric Power Scheme will deliver both regional and national infrastructure.

The provision of, and access to, secure and reliable renewable electricity is of critical importance to the social and economic wellbeing of the Bay of Plenty, and all New Zealanders. The Wheao Hydro-Electric Power Scheme will continue to contribute to the security of electricity supply in the Bay of Plenty Region (given it is embedded into the local electricity network), as well as contribute to the Government's strategic targets for renewable electricity generation and the decarbonisation of the New Zealand economy.

The NESREG provides that decision makers shall recognise and provide for the national significance of renewable energy generation activities. It also provides that matters of national significance include the need to develop, operate, maintain and upgrade renewable electricity generation activities. Given that the NPSREG acknowledges the importance of renewable energy infrastructure and the benefits derived from said infrastructure, it follows that the Wheao Hydro-Electric Power Scheme delivers nationally significant infrastructure.

Energy generation facilities, such as the Wheao Hydro-Electric Power Scheme, have been identified in the Bay of Plenty's Regional Policy Statement as regionally significant infrastructure. The regional policy statement provides that the definition of regionally significant infrastructure includes "facilities for the generation and/or transmission of electricity where it is supplied to the national electricity grid and/or the local distribution network".

Will the project:

Please explain your answer here:

N/A

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

The key sources of economic benefit from Fast Tracking for existing hydro are (a) the reduction in consenting costs, (b) the opportunity cost and loss of focus in the business while time and resources are dedicated to navigating the RMA process and (c) the lost value in generation capacity or consent duration that may occur from a traditional consenting process.

The cost to re-consent a small- medium hydro station through the traditional consenting pathway is approximately \$9(2) Most of the cost are incurred through council processing, hiring consultants, regional council hearing, and any Environment Court appeals – with very little investment into actual environmental benefits. These costs directly slow down investment in new generation assets and increase the cost of electricity for all New Zealanders – a straight up loss for NZ and one of the main arguments for fast-track consenting. Re-consenting the Wheao Scheme will help support the regional New Zealand economy.

Re-consenting Wheao through Fast Track will ensure no significant generation loss. This scheme is valued at nearly \$9(2)(b)(ii) in replacement costs. Wheao is a crucial contributor to peak electricity supply into the local grid. Previous re-consenting through the RMA has shown up to 4-6% loss generation and these were prior to the 2020 NPS-FM and NES policies, which now have stricter requirements for river restoration. The loss of generation through the current RMA pathway is expected to be greater than previous re-consents given the current regulatory environment.

New generation investment would otherwise be required to fill the increasing demand. In particular, distributed generation helps to avoid or defer investment in distribution and transmission assets.

The operation of the Wheao Scheme results in the injection of several million dollars of direct expenditure on wages and supplies in the Bay of Plenty region. Additionally, economic multiplier effects imply that additional indirect and induced expenditure would also result in a further economic benefit of several million dollars to the Bay of Plenty region.

The economics of hydro are that they require high upfront capital costs and occasionally significant capital refurbishment costs. More importantly, the key point for existing hydroschemes is that losing water doesn't lower the required O&M cost of the hydro station and hence the unit cost/KWh increases. This in turn eventually results in higher electricity costs for all New Zealanders. If this zero-cost hydro-electricity at the margin is reduced and replaced with something else, then, unless that new generation has the same operating and economic characteristics as controlled hydro-electricity, it must increase costs to the electric power supply, and probably prices.

It is critical to maintain the generation output from the Wheao HEPS to avoid the need to replace this output in both the short and long term, or add to the expansion of capacity required elsewhere. Any loss of output will also add to the extent to which the Bay of Plenty region is dependent on net imports and generally more distant sources of supply.

In the Bay of Plenty Region, annual electricity demand exceeds local generation capacity, necessitating the import of power from elsewhere via the national transmission grid. In order to meet the objectives in the Government's coalition agreements and as detailed in Electrify NZ, New Zealand needs to more than double its existing installed electricity generation capacity over the next 25 years. The Wheao Hydro-Electric Power Scheme will deliver significant economic benefits in the form of directly supplying electricity to the Bay of Plenty Region.

In summary, the economic benefits of the project include:

- providing a secure supply of renewable energy directly to the Bay of Plenty Region's electricity network;
- contributing to the doubling of renewable electricity generation, and emissions reductions targets;
- avoidance of a slight increase in vulnerability of the Taupo region to the loss of electricity supply through transmission failures;
- provision of hydro capacity in a different climatic region from the main storage lakes in the South Island; this reduces the risk of correlated dry periods across hydro capacity;
- maintenance of the economic activities associated with operation of the scheme to the benefit of local suppliers of labour, goods and services.

Will the project support primary industries, including aquaculture?

No

Please explain your answer here:

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

No

Please explain your answer here:

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

Yes

Please explain your answer here:

The Wheao Scheme will have significant climate change mitigation benefits, including supporting the reduction of greenhouse gas emissions. The Wheao Scheme provides 26 MW with annual generation in the range of 111 GWh which powers up to 17,000 homes.

The Wheao Scheme has an important role in achieving New Zealand's 2050 targets in the Climate Change Response Act 2002. The Wheao Scheme will also play a role in substituting fossil fuel energy with renewable energy. That amounts to real emissions reduction, especially as New Zealand's electricity cannot be imported, and therefore it will contribute to reductions in the country's greenhouse gas inventory. Economic analysis indicates greenhouse gas emission reductions of approximately 41,000 tCO₂-e (for gas) or 105,000 tCO₂-e (for coal).

The ongoing operation of the Scheme contributes towards decarbonising New Zealand's economy. It will also contribute to achieving the 90% renewable energy target by 2025 set out in the National Policy Statement for Renewable Electricity Generation and the aspiration to achieve 100% renewable energy by 2030.

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

Yes

Please explain your answer here:

As a generator of electricity, Manawa Energy Limited is recognised as a lifeline utility under the Civil Defence Emergency Management Act 2002 (Schedule 1, Part B). Lifeline utilities play a vital role in recovery from natural hazards, and have statutory duties such as the need to ensure the ability to function to the fullest possible extent, even though this may be at a reduced level, during and after an emergency. This includes the Wheao Hydro-Electric Power Scheme.

Will the project address significant environmental issues?

Yes

Please explain your answer here:

Although the Wheao Hydro-Electric Power Scheme has not been assessed as causing any 'significant environmental issues', it is noted that the Scheme has significance as a generator of renewable electricity, supporting the reduction of greenhouse gas emissions. Additionally, Manawa Energy has proposed improved fish passage and new residual flows as part of the project, which address important environmental issues.

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

Yes

Please explain your answer here:

Mitchell Daysh has carried out a full planning assessment of the project against the relevant statutory and non-statutory planning documents, and iwi/hapū resource management plans. Its conclusion is that the project is consistent with those documents, which are the:

- Bay of Plenty Regional Policy Statement;
- Bay of Plenty Regional Natural Resources Plan, pursuant to which the resource consents for the project are a controlled activity;
- Taupō District Plan;
- Te Ara Whānui o Rangitāiki;
- Ngāti Manawa Plan;
- Ngāti Whare Plan; and
- Hineuru Plan.

There are no spatial strategies relevant to the project.

Anything else?

Please write your answer here:

Manawa Energy would like to emphasise that it is currently spending up to **§ 9(2)** on the re-consenting of the Wheao Hydro-Electric Power Scheme (with multiple schemes needing to be re-consented), on a process that will likely take more than two years from lodgement to obtaining consent (excluding any appeals that may be lodged). That is for a scheme that has been in operation for 40+ years, has effects that are well understood, and is a controlled activity, meaning consent cannot be declined. The RMA process is extremely inefficient for critical infrastructure such as this scheme, and Manawa Energy seeks that the project be listed in the Bill to make use of the fast-track process for this reason.

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:

Climate Change – Climate change impacts on the Scheme have been assessed by Tonkin & Taylor as part of its Hydrological Assessment. Natural variability in the climate will impact the behaviour of the Wheao Hydro-Electric Power Scheme and its effects on the flow regime of the waterbodies associated with the Scheme. The changes in temperatures, rainfall, drought conditions from predicted climate change has the potential to reduce the mean flows of the Wairoa River Catchment. It is anticipated that there will be a reduction in summer and spring flows and an increase in autumn and winter flows. Despite these changes, it is not anticipated that climate change will have any material impact on the way in which the scheme operates.

Natural Hazards – The Wheao Hydro-Electric Power Scheme could be affected by potential earthquakes and floods. However, key structures of the Scheme are inspected and maintained to ensure that they are able to perform as intended during natural hazards. Flood risks are mitigated throughout the Wheao Hydro-Electric Power Scheme by a variety of structures and procedures.

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:

Across the country Manawa Energy's power schemes operate within the constraints of approximately 500 consents and approximately 3,500 resource consent conditions that govern operations, monitoring and maintenance, and ensure Manawa Energy's schemes operate in an environmentally sustainable and legally compliant way. Trustpower/Manawa Energy has typically had a positive record of compliance with its consents, with up to 99 percent compliance across our consent conditions. Most non-compliances received have related to minor technical incidents that have been quickly addressed. In the last 30 years Trustpower/Manawa Energy has also received a handful of abatement or infringement notices. These lower-level enforcement actions have always been promptly addressed to a high standard and no further action has been taken by the regulators.

Trustpower/Manawa Energy has only been prosecuted by a regulator once in 30 years. Otago Regional Council brought a prosecution against Trustpower for a discharge of sediment from Beaumont Race at our Waipori Scheme into the Beaumont River. We plead guilty to the offence and while we are disappointed this occurred, the Judge complimented Trustpower on its response to the incident, particularly the open and collaborative approach to engagement with the investigating council and expression of remorse through a public apology, self-initiated environmental monitoring and participation in restorative justice process.

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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:

Cory Lipinski

Important notes