Response ID ANON-URZ4-5FGY-G

Submitted to Fast-track approval applications
Submitted on 2024-05-03 13:39:45

Submitter details

Is this application for section 2a or 2b?

2A

1 Submitter name

Individual or organisation name:
Eastland Generation Ltd

2 Contact person

Contact person name:
Ben Gibson

3 What is your job title

Job title:
Strategic Projects Manager

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:

9 Manukorihi Drive
Kawerau 3127
New Zealand

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 Waihi Hydroelectric Power Scheme (Waihi HEPS) is located off Ruapapa Road, approximately 26 km northwest of Wairoa, within the Wairoa District Council and Hawke's Bay Regional Council (HBRC) jurisdictions.

The Waihi HEPS dam is located on the Waihi Stream approximately 40m above the Ruapapa Road bridge. The water reservoir formed by the dam (Lake

Ruapapa) extends upstream of the dam. The dam and reservoir are located on land legally described as Lot 1 DP 9120 having an area of 95.79ha.

The power station is located on the true left bank of the Waiau River, near the confluence of the Waihi Stream and the Waiau River, which is some 1.8km downstream of the dam face. The land on which the power station is located is legally described as Section 2 SO 7944 and has an area of 3.178ha.

Water taken from Lake Ruapapa is conveyed to the power station by way of underground conduit / tunnel and penstock, which traverses adjoining farmland at 1345 Ruapapa Road. Established easements over the farmland provide for the conveyance of the water and for right of way access to the power station. The land traversed by the underground conduit is legally described as Section 5 SO 8535, and is held together with a number of other land parcels under a single record of title covering an area of some 2044.65ha.

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

Yes

upload file:
Waihi HEPS - Records of Title - stitched.pdf was uploaded

Who are the registered legal land owner(s)?

Please write your answer here:

Eastland Generation Ltd owns the land on which the dam and water reservoir are located; and the land on which the power station is located.

LandCorp Farming Limited owns the land between the dam and power station. Access rights and rights to convey water over this land are established by way of existing easement in favour of Eastland Generation.

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:

Eastland Generation (the applicant) is the registered owner of the land on which the dam and reservoir are located (Lot 1 DP 9120) as well as the land on which the power station and penstocks are located (Section 2 SO 7944).

The underground conduit / tunnel that conveys water from the dam to the power station traverses land owned by Landcorp Farming Limited (Section 5 SO 8535). However, Eastland Generation benefits from a suite of easements providing access rights and rights to convey water by way of the tunnel, over the land.

Copies of the records of title for each of these three land parcels are attached together with a copy of the easements granting access rights and rights to convey water by way of tunnel over Section 5 SO 8535 to Eastland Generation.

Section 2: Project details

What is the project name?

Please write your answer here:
Waihi Hydroelectric Power Scheme Reconsenting

What is the project summary?

Please write your answer here:

Replacement of existing resource consents for the existing 5MW Waihi Hydroelectric Power Scheme ("Waihi HEPS" or "the Scheme") to ensure the continued operation, use and maintenance of the Scheme beyond the 2026 expiry of the existing consents.

What are the project details?

Please write your answer here:

The proposal is to replace the existing resource consents relating to operation of the 5MW Waihi HEPS, which expire in September 2026. Reconsenting of the Waihi HEPS will enable the continued operation, use and maintenance of the Scheme and preserve its role as an embedded generation scheme that provides electricity via the local distribution network directly to customers in the local Wairoa area.

This will ensure the Scheme continues to contribute to security of local electricity supply and the Governments' strategic targets for the generation of renewable electricity in New Zealand

Eastland Generation currently hold a suite of seven resource consents for the Waihi HEPS. The consents were originally obtained in 1979 as Water Permits under the Water and Soil Conservation Act 1967. These Water Permits were deemed resource consents upon the enactment of the Resource Management Act 1991 and were given a 35-year term until expiry in September 2026.
The power station was opened in 1986 and has been in operation for nearly 40 years. The Scheme was originally established and operated by Wairoa Power. Eastland Generation has owned and operated the Waihi Scheme since 1999.

The operating regime for the Waihi HEPS will remain largely the same as currently authorised. The key activities that will comprise the continued operation, use and maintenance of the Waihi Scheme are summarised as follows:

- The damming of water in the Waihi Stream by way of an existing 15m
high concrete gravity dam and associated creation of a reservoir (Lake Ruapapa). The reservoir has a length of some 5.2km and covers an area of approximately 42ha. The reservoir has an operating range of 5.7m.
- Diversion of the flow of an unnamed stream just upstream of Ruapapa Road into the reservoir.
- The take and diversion of up to 6.0m3/s of water from the reservoir for hydroelectricity generation purposes.
- Diversion of water from the reservoir through 919 metres of conduit and 163 metres of penstock to the powerhouse below the dam on the Waiau River, where electricity is generated by way of two 2.5MW turbines.
- The discharge of water from the powerhouse to the Waiau River at a maximum rate of 6.0m3/s.
- Discharge of excess water, not used for generation, below the dam through a combination of dam overtopping and through the sluice gates to the stilling basin, where it continues to the original course of the Waihi Stream.
- Sediment flushing from the reservoir through a sluice gate into the Waihi Stream below the dam, when the Waiau River is discoloured following a flood or fresh.
- Maintenance of a compensatory flow of at least 50 litres / second in the residual reach of the Waihi Stream below the dam
- Management of vegetation around the perimeter of the lake and other areas

There are 26 conditions relating to the existing resource consents for the Waihi HEPS, some of which may be able to be carried over to new consents for the scheme, while others are no longer relevant as they related to the original establishment of the scheme. All parameters set by the existing resource consent conditions will be reviewed in detail by technical specialists as part of a comprehensive assessment of the effects of the Project and adopted, amended and/or extended as appropriate to ensure the actual and potential effects of the Waihi HEPS are appropriately avoided, remedied or mitigated.

Some minor changes are anticipated to operating practices around the flushing of sediment from the reservoir, including an increase in frequency above the current limit of 4 times per year. Changes are required to improve Eastland Generations' ability to manage silt and sediment build up in an effective and efficient manner, while ensuring downstream effects are appropriately addressed. Any changes proposed to operating practices for sediment flushing will be informed by specialist advice from hydrological, water quality and ecological experts.

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

Please write your answer here:

No staging is proposed.

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

Please write your answer here:

Resource Management Act 1991
- Water take, diversion, damming and discharge consents.
- Land use consents for existing structures and the maintenance, upgrade and repair of those structures; and to disturb and deposit material on the beds of water bodies as a result of the normal operation of the Waihi HEPS.

Note that Water and Soil Conservation Act 1967, under which authorization for the existing Scheme was granted, was superseded by the RMA in 1991, such that the regulatory environment in place today is very different to that applying when the current resource consents were originally granted.

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

Please write your answer here:

Hawke's Bay Regional Council

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

Please write your answer here:

None

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

No

Please explain your answer here:

The applicant is the land owner. Existing established easements are in place to provide for activities occurring on land other than that owned by the applicant.

All other approvals required by parties other than the applicant are already in place. For completeness these are outlined below.

Electricity Industry Participation Code 2010 (Code)

The connection of small-scale distributed generation (SSDG), such as the Waihi HEPS, to a distribution network is regulated under Parts 1 and 1A of Schedule 6.1 of the Code. There is an existing established connection between the Waihi HEPS and Firstlight Network's distribution network, such that no further approvals are required to enable continued operation of the Waihi HEPS under the replacement resource consents sought.

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

Please write your answer here:

The Waihi HEPS is an existing station that has been in operation for nearly 40 years. The current application seeks to renew the existing resource consents.

Continued operation, maintenance and upgrade of the Waihi HEPS under the replacement resource consent sought is not anticipated to result in any specific construction works. Any operational changes identified through specialist assessment as necessary to appropriately manage adverse effects are expected to be relatively small scale and timing of implementation can be addressed in consent conditions.

Any upgrade works and/or operational changes recommended by technical specialists as a result of detailed background monitoring and effects assessment work is expected to be relatively small scale. Eastland Generation is committed to implementing any measures identified through this process in a timely manner following grant of replacement resource consents in order to address any identified adverse effects and ensure compliance with consent conditions.

Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

Local Authorities
- Hawke's Bay Regional Council
- Wairoa District Council

Iwi Authorities:
- Ngāi Tamaterangi – hapū of Ngāti Kahungunu iwi
- Ngāti Mihi – hapū of Ngāti Kahungunu iwi
- Ngāti Ruapani

Adjoining Neighbours:
- Landcorp Farming
- Department of Conservation

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:

Local Authorities

• Hawke's Bay Regional Council

The Hawke's Bay Regional Council (HBRC) is the regulatory authority responsible for the suite of water take, damming, diversion and discharge consents required to reconsent the Waihi HEPS.
Eastland Generation has liaised with HBRC previously in relation to the existing resource consents for the Scheme, with both parties agreeing that many of the consent conditions are no longer fit for purpose and need to be updated. Eastland Generation will continue to work closely with HBRC to ensure they are aware of the pathway taken for reconsenting the project and that where possible, conditions are agreed and incorporated into replacement consents.

• Wairoa District Council

Wairoa District Council (WDC) is unlikely to have a regulatory role in the proposed reconsenting, as no land use consents are likely under the Wairoa District Plan. WDC will, however, have an interest in the application from an operational perspective in terms of potential effects on Ruapapa Road and 'Falls Bridge' and on their municipal drinking water take from the Waiau River near Frasertown, downstream of the Waihi HEPS.

Eastland Generation will consult with WDC in regard to these matters, including meeting with senior engineering staff responsible for road & bridge maintenance and water supply, to identify any issues and concerns and whether these can be addressed by the application.

Iwi Authorities

The relevant iwi authorities are understood to be:

- Ngāi Tamaterangi – hapū of Ngāti Kahungunu iwi
- Ngāti Mihi – hapū of Ngāti Kahungunu iwi
- Ngāti Ruapani

Eastland Generation is committed to working alongside iwi and will meet with key iwi representatives to assist in identifying cultural values and interests in the project location and any concerns arising from the proposed reconsenting of the Waihi HEPS.

Once available, Eastland Generation will share summaries of specialist reports and application material, particularly with respect to addressing the effects of the Waihi HEPS on water quality and quantity and ecological effects. Further information will be provided as requested.

Eastland Generation will also offer to support preparation of Cultural Impact Assessments to assist with identifying issues considered important and understanding whether these can be addressed by the application.

If supported by iwi and hapu groups, a combined hui is proposed to be held at one of the downstream Marae to discuss any issues and concerns from an iwi perspective and whether these can be addressed by the application.

Adjoining Neighbours

Eastland Generation will undertake consultation with land owners around Lake Ruapapa, the hydro scheme structures and power house.

Consultation will include (but not necessarily be limited to):

• Placing a notice in local newspapers and posting information on the Eastland Generation website advising of the proposal to reconsent the Waihi HEPS; and inviting interested parties to attend a consultative meeting;
• Writing to directly adjoining neighbours with details of the proposal to reconsent the existing Waihi HEPS, details of any mitigation measures and contact information.
• Follow up meetings (face to face, online or phone call) as requested.
• All communications with neighbours will be recorded on a consultation data base.

Most land around Lake Ruapapa, the dam and powerhouse is owned and farmed by Landcorp Farming. Eastland Generation is not aware of any issues that Landcorp or farm managers may have relating to operation of the Waihi HEPS. However, any issues identified during consultation will be addressed as appropriate. It is anticipated that with appropriate mitigation, effects on these parties will be less than minor.

Land immediately adjoining the western boundary of the allotment on which the power station is situated is a 'Waiau River Conservation Area'. This is a 1.3ha parcel of land administered by the Department of Conservation (DOC). Given the location of the reserve upstream of the power station, any effects of the Waihi HEPS on the reserve are anticipated to be less than minor. However, DOC may have broader interests in the project and any issues identified during consultation will be addressed as appropriate.

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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 no public works processes are required

Section 4: Iwi authorities and Treaty settlements

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

Please write your answer here:

Ngāi Tamaterangi and Ngāti Mihi are party to the Iwi and Hapū of Te Rohe o Te Wairoa Claims Settlement Act 2018, which applies to the Waihi HEPS site. Specific reference is made, in the Settlement Act, to the Waiau River and its tributaries, which includes Waihi Stream and Lake Ruapani. A Deed of Settlement was signed by some 60 iwi and hapū groups from Te Rohe o Te Wairoa and the Crown on 26 November 2016. This Settlement was then legislated as the Iwi and Hapū of Te Rohe o Te Wairoa Claims Settlement Act 2018.

The Te Wairoa Claims Settlement Act includes; an agreed historical account, a Crown acknowledgement and apology, and varying levels of cultural, financial and commercial redress. Key principles and provisions of this settlements, including any ongoing processes, are provided below:

• The promotion of relationships between Te Wairoa and Crown agencies, local authorities, non-governmental organisations and specified entities;
• Deeds of recognition obliging the Crown to consult with Te Wairoa on specified matters and Ministers to have regard to Te Wairoa's views in

decision-making;
• The protection and enhancement of the conservation values associated with the places and sites owned by the Crown within Te Wairoa area of interest.
• The vesting of five sites in Te Wairoa;
• A total of 19 statutory acknowledgements including the Waiau River and its tributaries within the area of interest;
• Multiple deeds of recognition, including one obliging the Crown to consult with Tātau Tātau o Te Wairoa Trust on matters relating to the Waiau River and have regard to their views regarding the special association of the iwi and hapū of Te Rohe o Te Wairoa within this area; and
• The implementation of multiple overlay classifications over scenic reserves in and around Wairoa. These overlays seek to acknowledges Te Wairoa's traditional, cultural, spiritual and historical association with specific sites of significance.

There are no vested sites or overlays relevant to the subject site. Further, no private land is to be directly affected under the Iwi and Hapū of Te Rohe o Te Wairoa Claims Settlement Act. The subject site is, however, placed within a tributary of the Waiau River within Te Wairoa's area of interest. The subject site is, therefore, subject to statutory acknowledgement and a deed of recognition obliging Crown consultation.

Ngāti Ruapani

Lake Ruapapa and thus the subject site are within Ngāti Ruapani's identified area of interest. Ngāti Ruapani and the Crown signed an agreement in principle on 27 August 2022. However, for the purposes of this application, no settlement has been reached at the date of submission.

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?:

N/A

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

No

If yes, please explain:

N/A no protected customary rights exist in relation to the subject land and water.

Upload your assessment if necessary:
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Section 5: Adverse effects

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

Please describe:

Eastland Generation has appointed technical consultants to monitor existing hydrology, water quality and ecology and describe the existing environment in and around the Waihi HEPS. This will provide a robust understanding of the nature and scale of adverse effects associated with continued operation, use and maintenance of the Waihi HEPS, noting that no substantive operational changes are proposed, and inform the context of the existing environment against which the actual and potential effects of the proposal must be assessed.

Differing approaches to defining the existing environment have been adopted when considering applications for replacement resource consents. The High Court in Ngati Rangi Trust v Manawatu-Whanganui Regional Council [2016] NZHC 2948 concluded that it should not be assumed that existing

consents with finite terms will be renewed or renewed on the same conditions. The Court adopted the position that in the context of renewal consents, the existing environment cannot include the effects caused by the activities for which the renewal consents are sought, unless it would be fanciful or unrealistic to assess the existing environment as if those structures authorised by the consents being renewed did not exist.

Removal of the existing Waihi HEPS structures would require resource consents, which may not be granted, and generate adverse effects, with no guarantee that the environment could be returned to a pristine and naturalised state on removal of the Scheme. As such, it is considered fanciful and unrealistic to consider the existing environment against which effects must be assessed, to be one in which the Waihi HEPS did not exist. Instead, the technical assessments will seek to adopt a 'real-world' approach which recognises the residual effects of the previously consented activities (in particular those associated with the dam) within the assessment of effects.

Adverse effects associated with the proposal can be generally grouped as follows:
• Hydrological effects, including water quantity
• Water quality effects
• Ecological effects
• Landscape and natural character
• Cultural effects
• Dam safety effects

Hydrological Effects and Water Quantity

A full hydrological and water quantity assessment will be undertaken for the project by an expert hydrologist and will consider effects of the continued damming, diversion, take and discharge of water on the hydrology of Lake Ruapapa, the Waihi Stream and Waiau River.

Key hydrological and water quantity effects of the Scheme include those associated with:

- the damming of water in the Waihi Stream, which has altered the stream form and characteristics to create a lake upstream of the dam;
- variation in lake levels over an operating range of 5.7m associated with operation of the Scheme;
- the construction of a stilling basin for energy dissipation at the base of the dam;
- variable flows in the Waihi Stream downstream of the dam whereby flows fluctuate between generally lower residual flows and elevated flows following the release of water from the sluice gates; and
- potential for reduced flow volumes and availability of water resources for downstream users during extended periods of dry weather.

Particular consideration will be given to the acceptability of effects associated with the current take and discharge rates of 6.0m3/s, the operating range of the lake and the minimum residual flow requirements in the Waihi Stream.

Consideration will also be given to natural variability in the climate and potential for increased temperatures or dry conditions to further reduce or prolong summer low flows. Similarly, the potential for increased flows in winter or during storm events and peak flow discharges as a result of an increase in mean rainfall, will be taken into account.

Adverse hydrological and water quantity effects will essentially remain as existing or be reduced as a result of the implementation of mitigation measures recommended by technical experts, and are considered to be at an acceptable level.

Water Quality Effects

A full water quality and ecological assessment will be completed for the proposal to understand the actual and potential adverse effects of the continued operation of the Waihi HEPS. This will be informed by extensive monitoring of existing water quality and freshwater ecology in and around the Scheme. This monitoring commenced in early 2023 and will address effects of the Scheme on water temperature, nutrients, E. coli, total suspended solids, turbidity, and water clarity.

Very high water temperatures can be detrimental to freshwater ecology. However, warm water temperatures can also increase productivity in aquatic communities. Consideration will be given to the need and ability to modify the existing residual flow regime to ensure changes in water temperature in the Waihi Stream downstream of the dam, resulting from the Scheme, do not result in undue adverse effects.

The three sluice gates in the dam are essential for the safe operation of the hydro-electricity scheme. These gates sit at the base of the dam and are designed to release water during high inflows and release sediment or debris built up behind the gates. The purpose of the sluice gates is to sluice away sediment build-up. The sluice gates are somewhat unusual because they are at the bottom of the dam and entirely underwater, which makes access difficult.

Existing consent conditions limit the frequency of water release via the sluice gates to no more than four times per year, the duration of each release to no more than 10 minutes and the maximum discharge rate to no more than 130 cubic metres per second. Eastland Generation intends to seek changes to these parameters to provide a more effective regime for managing the build-up of silt and sediment at the base of the dam. Proposed changes to these parameters will be developed together with technical specialists to ensure downstream effects from the release of water and silt are appropriately managed.

Management measures will continue to include the discharge of silt only when the Waiau River is discoloured following a flood or fresh.

Adverse water quality effects will essentially remain as existing or be reduced as a result of the implementation of mitigation measures recommended by technical experts and are considered to be at an acceptable level.

Ecological Effects

Periphyton

Periphyton (benthic algae) is essential for the functioning of healthy ecosystems, but when it proliferates, for example as a result of elevated water temperatures, it can degrade instream values. The amount of periphyton present in a river can be assessed in terms of biomass, measured as the amount of chlorophyll a per area (mg chl a/m2), or visually as proportional cover on the stream bed (% cover) in a defined reach. HBRC have measured visual periphyton cover in the Waiau River at Otoi, upstream of the Waihi HEPS since 2011 (HBRC 2020 State of the Environment Report). Periphyton monitoring at this site between 2013-2018 indicated good water quality (HBRC 2020).

There is no existing periphyton cover or biomass information for the Waihi Stream and this will be addressed by Eastland Generations ecological specialists as part of the monitoring of the existing environment and assessment of adverse effects.

Macroinvertebrates

Macroinvertebrate communities will be sampled upstream and downstream of the Waihi HEPS to determine any adverse effects of the Scheme on macroinvertebrate community health and the need for any mitigation measures. Potential adverse effects may arise from increased water temperatures, suspended and settled sediments and habitat change.

Fish Passage

Fish passage requirements will be determined based on an assessment of the migratory fish species expected to be present in the Waihi Stream catchment (from NZFFD records, fish community surveys, and predicted fish distributions). Surveys will be undertaken to determine:

- Opportunities for upstream fish passage through the residual reach of the Waihi Stream between the foot of the dam and the Waiau River.
- Opportunities for fish to move upstream past the dam to Lake Ruapapa and beyond.
- The ability for upstream migratory fish to access the tailrace discharge from the power station.
- The effectiveness of fish screening measures to mitigate against fish becoming entrained within the water intake structures at Lake Ruapapa, and the availability of an alternative downstream passage opportunities.

Eastland Generation proposes to maintain the existing water intake structure in Lake Ruapapa and the 50mm spaced screens that block debris from entering the tunnel and aids in deterring the entrapment of larger eels and fish into the tunnel.

Terrestrial Ecology

Eastland Generation's extensive planting of native seedlings on land above the water line at Lake Ruapapa has resulted in positive effects on terrestrial ecology, specifically assisting with the regeneration of the area and enhancement of the habitat for native birds and other wildlife.
Overall, it is anticipated any adverse effects on ecological values will be low.

Landscape and Natural Character Effects

The Waihi HEPS is located within a rural setting comprising a mix of farm land and forestry. The various components of the Scheme have been in place for nearly 40 years and have become recognised as part of the local landscape. Reconsenting of the existing Scheme will not result in the alteration of any physical structures or the current appearance of the Scheme.

The presence of the Scheme affects the natural character values of the location through the presence of structures, changes to the flow regime, morphology, vegetation and habitat of the Waihi Stream and Waiau River.

A specialist landscape and natural character assessment will be undertaken. However, overall, it is considered that adverse effects on landscape and natural character values will be generally low.

Cultural Effects

The cultural values and historical associations with the Waihi Stream, Waiau River and their tributaries must be described by hapu and iwi. Eastland Generation is committed to engaging with hapu and iwi to ensure that cultural values and aspirations are reflected in the continued use, operation and maintenance of the Waihi HEPS as practicable, including through conditions of consent.

Dam Safety Effects

The Waihi HEPS dam is managed in accordance with the New Zealand Society of Large Dams (NZSOLD) Guidelines. This includes routine monitoring and surveillance of the dam, identification of any dam safety recommendations or inconsistencies with the NZSOLD Guidelines. Implementation of any necessary changes / improvements are then carried out by Eastland Generation. All dam safety issues are identified, recorded, managed and tracked as part of a comprehensive dam safety management program.

The NZSOLD Dam Safety Risk Management Process stipulates that upon identification of any elements that no longer meet the NZSOLD Guidelines, dam owners are to undertake an assessment of potential risk treatment options that are available to assist with realigning a dam with the NZSOLD Guidelines, prior to implementing any improvements / changes.

These processes will ensure dam safety continues to be suitably managed by Eastland Generation in accordance with the NZSOLD Guidelines.

Conclusion

Overall, it is considered that the continued operation and maintenance of the Waihi HEPS, in a manner consistent with the advice of technical experts and informed by cultural impact assessment, will appropriately avoid, remedy or mitigate potential adverse effects on the environment.

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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:

National Policy Statement for Renewable Electricity Generation (NPSREG)

The NPSREG came into effect on 13 May 2011. It recognises the national significance of renewable electricity generation activities and provides for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation. The continued operation and maintenance of the Waihi HEPS contributes to the achievement of this objective.

Continued operation and maintenance of the Waihi HEPS would also recognise the benefits associated with renewable electricity generation activities by maintaining the generating capacity of the Scheme and assisting to maintain the security of the local electricity supply in the Hawke's Bay Region, as well as contributing positively towards achieving New Zealand's target for electricity generation from renewable resources.

The site is practically located where it has been able to rely on consistent river flows and the head differential between Lake Ruapapa and the power station at the Waiau River to generate renewable electricity for nearly 40 years. In addition, the Scheme is already embedded in the local distribution network, with existing connections.

For these reasons, it is considered that the continued operation and maintenance of the Waihi HEPS is consistent with the relevant objectives and policies of the NPSREG.

National Policy Statement on Freshwater Management (NPSFM)

The NPSFM came into effect on 3 September 2020 and sets a national policy framework for managing freshwater quality and quantity. 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 NPSFM seeks to ensure that natural and physical resources are managed in a way that prioritises the well-being of water bodies and freshwater systems in the first instance; then the health needs of people; and then the well-being of communities now and in the future.

The Government has indicated an intent to review and replace the NPSFM and to pass legislation amending the RMA such that, in the interim, consent applicants will no longer need to demonstrate their proposed activities follow Te Mana o te Wai. Until such changes occur, however, the NPSFM 2020 remains relevant.

Eastland Generation has appointed technical consultants to assess the actual and potential effects of the Scheme on the extent and values of the rivers and streams affected by Waihi HEPS. Recommended management measures are expected to be developed having regard to the hierarchy approach set by the NPSFM. These will focus on ensuring operation of the Scheme in a manner that ensures ecosystem health at all times, in particular during sediment flushing required to maintain the Scheme, and during summer months when reduced flows, elevated water temperatures and periphyton blooms in the section of Waihi Stream below the dam have the potential to cause adverse environmental effects. The Scheme will protect the health needs of people by avoiding water quality or quantity effects on the downstream municipal drinking water supply and by providing a secure supply of electricity. Contribution to the provision of energy security through the continuation of the existing renewable generation scheme will also support the ability of people and communities to provide for their social, economic and cultural wellbeing.

The NPSFM policies of potential relevance to the Waihi HEPS include:

- Policy 1, the management of freshwater in a way that gives effect to Te Mana o te Wai;
- Policy 2, the active involvement of tangata whenua in freshwater management;
- Policy 2, the implementation of an integrated freshwater management approach;
- Policy 5, management of freshwater through a National Objectives Framework (NOF) to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved;
- Policy 7, the loss of river extent and values is avoided to the extent practicable;
- Policy 9, The habitats of indigenous freshwater species are protected;
- Policy 10, The habitat of trout and salmon is protected, insofar as such an outcome is consistent with the protection of indigenous species;
- Policy 11, Freshwater is allocated and used efficiently; and
- Clause 3.26, the passage of fish is maintained, or is improved, by instream structures (except where necessary to protect desired fish species).

For the following reasons, it is considered that the continued operation and maintenance of the Waihi HEPS can occur in a manner that is consistent with

the NPSFM.

- Eastland Generation will seek to engage with representatives of the iwi and hapu identified in Sections 3 and 4 of this application, both in the lead up to and throughout the consideration of the application for replacement resource consents. Support will be provided for the preparation of cultural impact assessments, where proposed by iwi and hapu. This may lead to further analysis of iwi and hapu interests in the Waihi Stream and Waiau River.

- Eastland Generation will seek to adopt an integrated approach to the assessment of potential effects of the Waihi HEPS. This will include comprehensive monitoring and assessment of the effects of the Scheme across the full extent of the Waihi Stream and Waiau River.

- HBRC has not yet developed a NOF for waterbodies in the Hawke's Bay Region. However, Eastland Generation will seek to develop a condition framework that requires the management of flows in the Waihi Stream and Waiau River in a way that addresses the potential for adverse effects related to operation of the Waihi HEPS.

- Continuation of the Scheme will not result in any further loss of river extent or values, noting that the formation of Lake Ruapapa as a result of the Scheme has resulted in hydrological, ecosystem and amenity values of a different character to those of the former Waihi Stream bed in this location. The lake and associated ecosystems and amenity are now well established and contribute to habitat and species diversity.

- The flow in the Waihi Stream downstream of the dam will not be altered from current practices, such that currently established indigenous freshwater habitats will not be affected by further changes to water depths, velocities and channel widths.

- It is not proposed to alter the habitat currently available for trout as part of the renewal of the existing Waih HEPS consents.

- The diversion, take and use of water for the Waihi HEPS is considered an efficient use of water. Eastland Generation seeks to maximise the use of water for the generation of electricity, subject to the capacity of the infrastructure in place.

National Environmental Standards for Freshwater (NES Freshwater)

The NES Freshwater came into effect on 3 September 2020. The various regulations in the Freshwater NES apply to resource consent applications that involve farming activities, the modification of natural inland wetlands, reclamation of rivers and the passage of fish affected by structures. The Freshwater NES is intended to increase regulatory consistency and certainty across New Zealand and ensure that any environmental effects of freshwater activities are appropriately managed.

The continued operation, use and maintenance of the Waihi HEPS is not considered to trigger any resource consent requirements under the NES Freshwater as:

- The dam is an existing structure and is, therefore, not subject to Subpart 3 of the Freshwater NES (Regulation 60) or to Regulations 72 or 73, which apply to weirs.
- Vegetation clearance, earthworks and the take, use, damming, diversion of water for the operation of specified infrastructure are provided for as a permitted activity under Regulation 46 and the relevant conditions can be met (irrespective of whether a natural inland wetland is proximate to these activities).

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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:

Reconsenting of the existing Waihi HEPS is expected to progress more quickly under the Fast Track process than a traditional RMA consenting pathway. While the application is to reconsent an existing hydro-scheme, it requires a complex suite of water take, damming, diversion and discharge consents under the Regional Resource Management Plan. Further, case law is clear that the effects of activities undertaken under the types of long-term regional consents relating to the Waihi HEPS cannot be discounted when considering applications to renew those consents and that all actual and potential effects of activities must be taken into account.

Due to this complexity, there is potential for HBRC to double the standard consent processing timeframes. There is also potential for public notification, in the event HBRC deems there to be insufficient certainty around the nature and scale of downstream effects and the ability for the Scheme to effectively manage these. This would result in delays to the project.

While hydroelectricity generation is well established technology in New Zealand, the consenting of such projects is not commonplace and as such there is a risk that a lack of expertise and experience within local government and the community could result in unnecessary delays through the traditional consenting pathways.

Under a traditional consenting process, an ability to double timeframes, publicly notify the application and go through a hearing process could result in a processing time of some 200 days (excluding any delays due to further information requests). This time could be at least doubled in the event of an appeal.

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

Please write your answer here:

The applicant and its consultants are familiar with consenting regionally significant infrastructure projects and have a track record of providing robust, complete applications that are based on robust monitoring of existing environmental conditions and address all relevant environmental, cultural and operational matters. This will ensure the proposed reconsenting of the existing Waihi HEPS through the fast-track process can be undertaken in an efficient manner in accordance with the requirements and timeframes set by the fast-track process.

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

Other

Please explain your answer here:

The National Policy Statement for Renewable Electricity Generation 2011 recognises the national significance of renewable electricity generation activities and includes a series of provisions which generally seek to provide for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities. Specific reference is made to enabling new and existing hydro-electricity resources and small scale distributed renewable electricity generation. This approach applies to the existing Waihi HEPS embedded generation scheme.

The role of the existing Waihi HEPS in providing embedded hydro generation and supporting security of energy supply to the Wairoa area is broadly recognised in regional and district documents relating to energy and infrastructure, including the regional and district plans.

Will the project deliver regionally or nationally significant infrastructure?

Regional significant infrastructure

Please explain your answer here:

The Waihi HEPS is recognised in the HBRC Regional Resource Management Plan as strategic infrastructure of regional importance given its role in generating renewable electricity that is distributed directly to the Wairoa area. The continued use, operation and maintenance of the Scheme by way of the proposed reconsenting will ensure the regionally significant benefits of this existing infrastructure are maintained.

Will the project:

contribute to a well-functioning urban environment

Please explain your answer here:

A 'well-functioning urban environment' is a term defined by the National Policy Statement for Urban development in Policy 1. It includes urban environments that:

- Support reductions in greenhouse gas emissions; and
- Are resilient to the likely current and future effects of climate change.

The project will contribute to a well-functioning urban environment by providing a continued and secure ongoing energy supply within the Wairoa community. The scheme provides enough electricity to power 1400 homes. The embedded nature of the Waihi HEPS in the local distribution network means that when there are supply issues on the National Grid, the Waihi HEPS can directly support local electricity demand.

The provision of a secure, resilient supply of electricity is likely to have further, less quantifiable impacts on the function of communities, including, but not limited to economic benefits through business confidence and higher standards of living.

As such, the proposal is considered to have both direct and indirect benefits on the wellbeing and functioning of urban environments locally and nationally.

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

Economic benefits are delivered though contributing to security and resilience of electricity supply and supporting economic activity and growth within the Hawke's Bay Region as well as minimising costs associated with obtaining electricity from outside the Wairoa District. As an embedded renewable generation scheme, the Waihi HEPS provides reduced transmission and distribution line losses and costs compared to electricity delivered via connection to the National Grid.

Continued use, operation and maintenance of this existing regionally significant infrastructure is an efficient use of resources, which appropriately recognises the level of investment made in the Scheme.

This is a key benefit of the scheme when compared to the practical constraints and costs of developing new renewable energy generation infrastructure, notwithstanding the comparatively small scale output of the Waihi HEPs.

Will the project support primary industries, including aquaculture?

Yes

Please explain your answer here:

The project will support New Zealand's energy sector by maintaining existing renewable hydroelectricity generation capacity, and contributing to diversity of energy supply.

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

Yes

Please explain your answer here:

The Waihi HEPS represents a sustainable use of valuable freshwater water resources. Renewable electricity generation must be located where the resource is available. For hydroelectricity generation, power schemes must be located where the existing elevation or natural fall is sufficient to be utilised to produce electricity and the catchment area has sufficient rainfall.

The Scheme provides for the use of freshwater in the Waihi Stream to generate renewable electricity to power homes and communities, thus supporting health and safety and economic well-being, while appropriately managing adverse effects on the values associated with freshwater and ensuring maintenance of the life-supporting capacity of freshwater resources, as required by the NPSFM.

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

Yes

Please explain your answer here:

The Government has set a goal of reaching 100% renewable electricity in New Zealand by 2035. In addition, the Climate Change Response (Zero Carbon) Amendment Act 2019 sets a target to reduce all greenhouse gas emissions (except biogenic methane) to net zero by 2050. The intent of this Act is to ensure that New Zealand's contribution to climate change mitigation is consistent with limiting global warming to 1.5o C above pre-industrial levels, in accordance with the Paris Agreement.

Continued use, operation and maintenance of the Waihi HEPS will contribute to central governments strategic targets around renewable electricity generation. Further, as an embedded generation scheme it supports security of energy supply and resilience in the event of National Grid supply disruption and assists in mitigating against the need for use of emergency diesel generators, with associated high greenhouse gas emissions, as an alternative form of energy supply.

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

Yes

Please explain your answer here:

The Waihi Dam structure is inspected and maintained in accordance with the NZSOLD dam safety guidelines to ensure that it is resilient to natural hazard events such as earthquakes and floods. The Scheme is resilient to flood risk, with the ability to manage water volumes and flows through retention or controlled release of water from the reservoir (via the sluice gates). This also enables the effects and risks generated by significant flood events downstream of the Scheme to be mitigated.

The Waihi HEPS is an embedded generation scheme that provides energy directly to the local distribution network from which it is delivered to customers. In the event of National Grid supply disruption, this embedded nature of the Scheme assists in supporting security of energy supply and mitigates against the need for use of emergency diesel generators, as an alternative form of energy supply, until such time as connections can be restored.

Will the project address significant environmental issues?

Yes

Please explain your answer here:

The Scheme is an established and reliable generator of renewable electricity in the Hawke's Bay Region, generating approximately 5 KW of electricity that is embedded in the local network. It supports national strategic targets for the generation of renewable energy and the decarbonisation of the New Zealand economy.

The Scheme represents the sustainable use of significant natural water resources undertaken in a manner that, through implementation of management measures relating to water quantity and quality, ensures the life-supporting capacity of freshwater bodies in and around the Scheme.

Specific operational and management measures, such as management of flow and lake levels, and riparian planting, ensure the benefits of the freshwater resource can be used for critical energy generation, while adverse environmental effects are appropriately managed.

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

Yes

Please explain your answer here:

Hawke's Bay Regional Council

The relevant HBRC planning instrument is the Regional Resource Management Plan (RRMP), which includes both a regional policy statement and a regional plan. The RRMP became operative in 2006 but has been subject to a number of plan changes since. Reconsenting of the Waihi HEPS would be pursuant to the current version of the RMMP.

Regional Policy Statement

The Regional Policy Statement section of the RRMP is primarily comprised in Chapter 3 'Regionally Significant Issues, Objectives and Policies'. For the reasons set out below, it is considered that the project will be consistent with the direction provided in the RPS.

Sections 3.1A Integrated Land Use and Freshwater Management and 3.10 Surface Water Resources

Of particular relevance to reconsenting of the Waihi HEPS are sections 3.1A 'Integrated Land Use and Freshwater Management' and 3.10 'Surface Water Resources'.

The objectives in Section 3.1A seek to ensure fresh water and the effects of land use and development are managed in an integrated and sustainable manner with attention drawn to a range of matters (including water quality, wetlands, allocation issues, life supporting capacity, drinking water, outstanding natural values, river management and flooding, aquifer recharge, recreational and conservation values. all of which are given equal weighting (OBJ LW1). The objectives also seek to ensure that the multiple and competing values of land and freshwater resources are recognized and balanced (OBJ LW2) and that tāngata whenua values are integrated into the management of freshwater and land use and development (OBJ LW3).

OBJ LW1 makes specific reference to recognising the potential national, regional and local benefits arising from the use of water for renewable electricity generation.

The objectives in section 3.10 seek to ensure the quantity of water in freshwater bodies is suitable for sustaining aquatic ecosystems and ensuring availability of water resources for a variety of purposes across the region; that the impact of climate related fluctuations is recognized; (OBJ 25) and that significant adverse effects on existing lawfully established activities are avoided (OBJ 26). The objectives also seek to ensure, water quality is suitable for sustaining or improving aquatic ecosystems, and for other freshwater objectives identified in accordance with the catchment-based integrated management objectives identified in section 3.1A.

These objectives pre-date the NPSFM 2020, which as identified in Section 6: National Policy Statements and National Environmental Standards of this application, directs the prioritisation of certain matters over others, in contrast to the balancing approach promoted by the RPS objectives. The RPS objectives need to be considered in light of the revised overarching direction provided by the NPSFM.

As noted in Section 6 of this application, it is considered that the continued operation of the Waihi HEPS can occur in a manner that will safeguard the existing values of Lake Ruapapa, the Waihi Stream and Waiau River and their tributaries. This will include, by way of consent conditions, limiting the operational variation in water levels in Lake Ruapapa, requiring the maintenance of minimum residual flows to manage the availability of water and high water temperatures in the section of Waihi Stream downstream of the dam. Clear parameters will be defined around the release of water and sediments from the dam with potential to use flushing flows to address any nuisance periphyton growth during summer. Sediment flushing is required for ongoing dam maintenance and advice from technical specialists will be used to inform robust conditions controlling the manner in which this is undertaken to avoid downstream effects on water quality, the life-supporting capacity of ecosystems and indigenous species and resource users, such as the WDC municipal drinking water supply downstream of the Scheme.

Detailed monitoring work currently underway will be used to understand the adequacy of existing fish passage provision and advice from a suitably qualified ecologist will be used to inform the need for any fish passage enhancement, the delivery of which can be achieved through appropriate conditions of consent, as required.

The provisions of the RPS also seek to ensure the quantity of water in freshwater bodies is suitable for sustaining aquatic ecosystems and ensuring availability of water resources for a variety of purposes across the region.The continued operation and maintenance of the Waihi HEPS will maintain water levels and flows within the Waihi Stream downstream of the dam and conditions relating to minimum residual flows and flushing of water and sediment will assist in maintaining instream and natural character values of the river.

Operation of the Scheme is not expected to adversely affect the quantity of water available for the WDC municipal supply downstream of the Scheme.

Eastland Generation is carrying out extensive planning of native seedlings on land above the water line of Lake Ruapapa to actively support riparian growth and regeneration and associated habitats for indigenous species, consistent with an integrated management approach.

Eastland Generation will engage with iwi and hapu to better understand tāngata whenua values associated with the Waihi Stream and Waiau River and their catchments and will seek to address any issues raised through reconsenting of the scheme. Eastland Generation is committed to the development of projects that respond to cultural values, including through the enhancement of freshwater quality, quantity and biodiversity where practicable.

3.1B Managing the Built Environment

Renewable electricity generation activities are recognised as strategic infrastructure, in the RRMP, being facilities, services and installations which are of greater than local significance, and can include infrastructure that is nationally significant.

OBJ UD5 seeks to ensure the integration of land use with significant infrastructure and recognises that strategic infrastructure in the wider region is essential to the well-being and health and safety of people and communities. The Waihi HEPS plays a critical role in delivering embedded electricity to the Wairoa area and supporting security of energy supply. Continued operation of the scheme, as proposed, will maintain its role as strategic infrastructure that plays a key role in supporting the health and safety and economic well-being of the Wairoa community.

Section 3.12 Natural Hazards

OBJ 31 seeks the avoidance or mitigation of the adverse effects of natural hazards on people's safety, property, and economic livelihood.
The Waihi Dam structure is inspected and maintained in accordance with the NZSOLD dam safety guidelines, so as to ensure that it can be operated in a manner that avoids or mitigates the potential for natural hazard events (i.e. earthquakes and floods). Flood risks in the Waihi Stream can be managed through retention or controlled release of water from the reservoir (via the sluice gates) to limit the effects and risks generated by significant flood events.

3.13 Maintenance and Enhancement of Physical Infrastructure

The objectives in section 3.13 seek to ensure the ongoing operation, maintenance and development of physical infrastructure that supports the economic, social and/or cultural wellbeing of the region's people and communities and provides for their health and safety (OBJ 32) and recognise that some infrastructure of regional significance has specific locational requirements.

The Waihi HEPS is existing physical infrastructure of regional significance. The Scheme has specific locational requirements to be sited on waterways suitable for the generation of hydroelectric power. The continuation of the existing Scheme in its current location is considered an efficient use of resources, which recognises the value of the existing investment. The continued operation of the Waihi HEPS will enable the water resources available in the Waihi Stream to be utilised in a manner that will provide for the social and economic wellbeing of people and communities within the Wairoa area. The use of the water resource to generate electricity will potentially avoid the depletion and use of non-renewable resources associated with other electricity generation facilities.

3.14 Recognition of Matters of Significance to Iwi/Hapu

Objectives in section 3.14 seek to recognise tikanga Māori values and the contribution they make to sustainable development and tangata whenua roles as kaitiaki (OBJ 34), and to consult with Māori in a manner that creates effective resource management outcomes (OBJ 35).

Eastland Generation will engage with mana whenua in order to establish an understanding of their relationship with the Waihi Stream and Waiau River, and how their role as kaitiaki may be provided for. Eastland Generation will respond to cultural values assessments as they are completed and further analysis may be required on these matters.

Overall, the Scheme is considered to be consistent with the objectives and policies of the RPS.

Regional Plan Matters

The regional plan relevant to this application includes the remainder of the RRMP. Chapter 5 'Regional Plan Objectives and Policies' and Chapter 6 'Regional Rules' are of most relevance. The policies are more specific than those in Chapter 3 and include environmental guidelines.

Loss of River extent and values:

Policy 66B seeks to avoid the loss of river extent and values unless there is a functional need for the activity in that location. Reconsenting the existing Waihi HEPS will not result in the loss of any additional river extent or values. Hydroschemes have a functional need to locate on suitable waterways, such that notwithstanding the changes to river extent and values at the time the Scheme was established, the Waihi HEPS is consistent with the policy requirement.

Discharge Permits

Policy 66C identifies a range of matters the consent authority must have regard to when considering applications for a discharge consent. Consistent with the NPSFM this includes the consideration of adverse effects on the life-supporting capacity of fresh water and fresh water ecosystems; and on the health of people and communities using fresh water. Subject to incorporating any mitigation measures recommended by Eastland Generations technical experts, it is anticipated the discharges associated with the Waihi HEPS can be managed in a way that achieves the policy objectives.

Surface Water Quality

Table 7 in Policy 71 sets the following surface water quality guidelines across the entire Hawke's Bay region:

1. Temperature: The temperature of the water should be suitable for sustaining the aquatic habitat.

2. Dissolved oxygen: The concentration of dissolved oxygen should exceed 80% of saturation concentration.

3. Ammoniacal nitrogen: The concentration of ammoniacal (N-NH4
+) should not exceed 0.1 mg/l.

4.Soluable reactive phosphorus
The concentration of soluble reactive phosphorus should not exceed 0.015 mg/l.

5. Clarity In areas used for contact recreation, the horizontal sighting range of a 200 mm black disk should exceed 1.6 m.
(These guidelines apply after reasonable mixing and disregarding the effect of any natural perturbations that may affect the water body, as set out in Policy 72.)

Table 8 in Policy 71 provides water quality guidelines that apply to specific catchments, including a suspended solids guideline of 25mg/l for the Wairoa River and tributaries upstream of Frasertown. This provides a key guideline in terms of managing overflows and silt and sediment flushing from the Waihi HEPS dam.

It is anticipated the water quality guidelines set out in Table 7 will generally be achieved under normal operating conditions. However, conclusions and any necessary mitigation measures will be informed by the detailed water quality monitoring and assessment work currently underway in and around the Waihi HEPS.

Sediment flushing required for dam maintenance is unlikely to fall below the 25mg/l suspended solids guideline set by Table 8 and specialist input will be used to inform consent conditions to appropriately manage this activity and any associated adverse water quality effects. Management measures are likely to involve restricting the discharge of sediments to times when there are elevated background levels of suspended solids in water ways (e.g. during rain and flood events), elevated background flows and limitations on the frequency, duration and volume of discharges.

HEPS will continue to operate within clearly defined parameters to ensure the water takes, diversions and discharges associated with the Scheme do not undermine the availability of water in Lake Ruapapa, Waihi Stream and Waiau River in quantities sufficient to sustain water quality and aquatic ecosystems, as well as the quantity of water available for the WDC municipal supply downstream of the Scheme.

Surface Water Quantity

Policy 73 seeks to sustain aquatic ecosystems by establishing a minimum flow in a river as that level which will maintain the existing ecosystem. This will be achieved by the Scheme.

Overall, subject to adoption of any necessary mitigation measures recommended by the technical experts the Scheme is considered to be consistent with the objectives and policies of the RRMP.

Wairoa District Plan

The Wairoa District Plan (WDP) has jurisdiction only over those elements of the Scheme located outside the bed of a river or lake, with all activities involving water use or the beds of rivers and lakes being within the jurisdiction of Hawke's Bay Regional Council.

Energy generation facilities and their ancillary activities fall under the definition of 'utilities' under the WDP. Specific provision is made for the operation, maintenance, minor upgrading, or removal of any lawfully established utilities as a permitted activity in the Rural Zone, applying to the project (Ref Rule 26.5.1). The continued operation, maintenance and minor upgrading of the Waihi Scheme is therefore permitted by and consistent with the WDP.

The WDP applies additional restrictions to the removal or alteration of vegetation within an area defined as an area of significant indigenous vegetation and/or significant habitat of indigenous fauna, which would include riparian vegetation associated with Lake Ruapapa and the Waiau River. However, specific provision is made for the trimming of trees and selective removal of vegetation in such areas, where this is to prevent a safety hazard or ensure continued delivery of a service. Any need for trimming or removal of riparian vegetation associated with the Waihi Scheme is expected to fall within this exemption and be permitted.

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?

No

If yes, please explain:

Hydroelectricity generation is potentially subject to the effects of climate change, where extended periods of dry weather affect lake levels and the ability to continually generate electricity. The vulnerability of the Waihi HEPS to climate change will be assessed in detail and taken into account in consideration of the design life of the scheme and duration of resource consents sought. Adverse effects of climate change are not expected to threaten the continued viability of the Waihi HEPS within the next 35 years, being the maximum duration for which the regional resource consents being sought for the Scheme can be granted. In the event the long-term viability of the Waihi HEPS due to climate change, is identified as a risk, time will be required to ensure appropriate alternative energy capacity is available to support the Wairoa community prior to any move to decommission the Waihi HEPS and loose the significant benefits provided by the existing Scheme.

Further, the risks of climate change to energy security are recognised at a national level and contribute to the recognised need to maintain a diverse range of renewable energy generation technologies and facilities. In this regard, the Waihi HEPS plays an important role in delivering locally generated hydroelectricity to the Hawke's Bay Region.

The Waihi Dam structure is inspected and maintained in accordance with the NZSOLD dam safety guidelines to ensure that it is resilient to natural hazard events such as earthquakes and floods. The Scheme is resilient to flood risk, with the ability to manage water volumes and flows through retention or controlled release of water from the reservoir (via the sluice gates). This also enables the effects and risks generated by significant flood events downstream of the Scheme to be mitigated.

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:

Waihi HEPS

An abatement notice was issued by Hawke's Bay Regional Council on 24 December 2015 and reissued on 6 January 2016, requiring Eastland Generation to close the sluice gates at the dam to prevent the discharge of silt into the Waiau River. The discharge began after a sluice gate was damaged in a storm in September 2015, with damage to the gate preventing it from being fully closed. Repair of the sluice gate was complicated by the somewhat unusual design of the dam, with the sluice gates located at the bottom of the dam face, meaning the gates are entirely underwater and complicating inspection and repair processes. Repair works were also delayed following issue of the abatement notices until an engineers' report could be provided and resource consents for the repair work obtained. Repairs were completed in March 2016 allowing closure of the sluice gates. This stopped sediment discharges down the river and enabled power generation to recommence.

In May 2016 HBRC laid charges against Eastland Group and contractors involved in repair of the sluice gates in relation to the works carried out on the Waihi Dam and the subsequent discharge of silt into the Waihi and Waiau Rivers. HBRC and Eastland Group subsequently agreed to resolve the prosecution without a conviction being entered in light of the understanding HBRC subsequently obtained of the events, in recognition of the commitments made by Eastland Group to come to a settlement and that pursuing a court case would have no direct benefit to the Wairoa community. No further action has been taken since that time.

Te Ahi O Maui Geothermal Power Station

An abatement notice was issued by Bay of Plenty Regional Council on 4 March 2019 in relation to alleged breaches of Eastland's resource consent 67340 for the take and discharge of geothermal fluid from the Kawerau Geothermal Reservoir. The abatement notice relates to exceeding the daily allowable limit of geothermal fluid on some occasions during the start-up and commissioning of the Applicants Te Ahi O Maui Geothermal Power Station. The Applicant worked with the BOPRC to determine the cause of the exceedances (incorrectly calibrated equipment and calculations in software) and resolve them to ensure that there would be no reoccurrence. No further action has been taken by the BOPRC since that time.

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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:
Ben Gibson

Important notes