

Your written comments on a project under the Fast Track Approvals Act 2024

Project name	Clutha Hydro Scheme
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Before the due date, for assistance on how to respond or about this template or with using the portal, please email contact@fasttrack.govt.nz or phone 0800 FASTRK (0800 327 875).

All sections of this form with an asterisk (*) must be completed.

1. Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
Organisation name (if relevant)	Queenstown Lakes District Council (QLDC)		
*First name	David		
*Last name	Wallace		
Postal address	74 Shotover Street, Queenstown, Otago, 9300		
*Contact phone number	s 9(2)(a)	Alternative	
*Email	s 9(2)(a)		

2. Please provide your comments on this application
<u>Foreword</u> The following constitutes QLDC comments in relation to the Contact Energy – Clutha Hydro Scheme under Sections 17 (1)(a) and 3(a)-(b) of the Act. QLDC’s technical comments are included below. <u>Further to this, personal comments from individual Elected Members are included within Appendix 1, 2 and 3 as the Act currently does not make clear whether comments are being requested from Elected Members of Officers of the Council.</u> <u>S17(3)(a) - Competing Applications</u> QLDC is not aware of any applications for an activity that are similar in nature to the proposed development. <u>S17(3)(b) - Existing resource consents issued where sections 124C(1)(c) or 165ZI of the Resource Management Act 1991</u> QLDC is not aware of any resource consents or applications relevant to this site or proposal where 124C(1)(c) or 165ZI would apply.

S17(1)(a) - Additional Comments

Reasons it would be more appropriate for the project to proceed through existing RMA processes rather than the processes under the Act

Whether this project proceeds through the Fast Track Approvals Act 2024 (FTAA) process or through an existing RMA process, as outlined below, QLDC has significant concerns that the proposal may impact its functions as a local authority with particular concerns regarding its ability to maintain a reliable and resilient community water supply for the Hawea area.

While QLDC can voice its concerns through the FTAA process should this application be accepted for that, acceptance to the process does give an indication that a project is likely to be approved if, in this case, national benefits outweigh any significant adverse effects whereas the existing RMA processes provide more scope for consideration of this application based on significant adverse localised effects to the community and the ability to protect that community potentially by declining consent.

Principal Areas of Concern

Community Water Supply

QLDC has significant concerns in relation to the impact of the proposal upon the community water supply for the Hāwea Township. For the reasons set out below, the adverse effects of not being able to provide a secure community water supply now and into the future for the Hawea area and its expected growth will be significant and will unlikely be able to be pragmatically mitigated should this project go ahead.

A report prepared for QLDC - Aqualinc Research Ltd (2010), Hāwea Groundwater and Lake Interaction – Modelling Report, states that peak day demand in Hāwea Township is projected to increase close to fourfold, reaching approximately 16,900 m³/day, by 2054. Under current operating levels, additional bores and a second borefield will be required to meet this demand. These additional bores and the second borefield is identified in the QLDC Long Term Plan 2024-2034 (LTP) as requiring future investment in upgrades to maintain capacity and resilience for this community water supply.

Hydrological modelling from the Aqualinc report demonstrates that water yields from the bores are directly dependent on lake levels because of the hydraulic connection between the lake and the water aquifer.

The below sets out the current QLDC bore water takes under existing lake levels:

- ***Normal operating range (MASL¹ 338m to 346m):***
 - *At 346m - large 300 mm bores can supply up to 100 L/s².*
 - *At 338m - one bore continues to yield 100 L/s, while another reduces to 58 L/s.*
- ***Contingent Operating Low (MASL 336m – 338m):***
 - *One bore drops to 75 L/s, another to 42 L/s, and the smaller 150 mm bore is limited to 16 L/s.*
- ***Historic Extreme Low (MASL 326m):***
 - *Bore yields reduce to negligible levels, effectively rendering the borefield inoperable.*

¹ Mean above sea level.

² Litres per second.

The proposal to lower Lake Hāwea's normal minimum operating level to MASL 336m (a 2m decrease), and further to MASL 333m (a 5m decrease) and MASL 330m (an 8 m decrease) under certain electricity generation conditions (as set out in the application), will significantly compromise the QLDC community water supply bore fields. This will significantly impact performance and resilience, with some existing bores potentially becoming uneconomic or inoperable. A potential solution may be that new bores will need to be developed earlier than planned in the LTP and there is no funding available for that. Security of community water supply will become operationally more complex and be at risk of not being able to meet future demand. This is of significant concern to QLDC. There may also be effects on other private water supplies in the Hawea Flats and surrounding area should the lake level be reduced and these impacts should be fully considered.

The Queenstown Lakes Spatial Plan is a vision and framework in place to support development across Queenstown Lakes. The plan outlines five key outcomes, including Outcome 1: *Consolidated Growth and more Housing Choices*, and Strategy 1: *Deliver responsive and cost-effective infrastructure*.

The Spatial Plan identifies future urban areas earmarked for growth, including land to the south of Hawea. An extension to the Urban Growth Boundary in the District Plan to reflect this future growth has already been implemented. The growth of Hawea will provide new housing options in the region reducing the dependence on Wanaka. Development within Hawea is contingent on adequate and reliable community water supply. It is crucial that appropriate consideration and assessment be given to the issue outlined in these comments regarding the existing QLDC bores and associated community water supply to Hawea.

Other Areas of Concern for QLDC

QLDC also has concerns that the proposal will impact the following:

Reserves and Recreational Values

QLDC manages the boat ramp, floating jetty and the swimming platform located on Lake Hawea by the Hawea Campground³ to the north of the Contact Energy intake. These are the only formal boating and watersport structures on Lake Hawea available to the community and are well used and very busy over the summer months. The boat ramp, floating pontoon and swimming jetty will likely be unusable at the proposed lowered lake levels. QLDC owns the Lake Hawea Campground adjacent to the Lake, which operates at capacity in peak periods. QLDC also maintains the public foreshore reserve land between the campground and John Creek including Scotts Beach (where the QLDC water supply bores are located).

Contingency plans and/or improvements to these facilities would be required to enable recreational use of Lake Hāwea at the significantly lower lake levels proposed. This will require additional funding from ratepayers that is not currently included in the LTP. There is also potential impact on recreational swimming – the current safe swimming area with swimming platform adjacent to the boat ramps is likely to be dry or unusable at certain lake levels. We have also been made aware of significant concerns relating to effects on anglers that use this lake and this may be considered further by the decision makers when they consider who should be able to provide comments on this proposal.

³ There is also an identified Kai Tahu Nohanga in the vicinity.

Dust generated from a larger exposed lakebed will impact campground and Nohanga users along with the public using the foreshore reserves for recreation and potentially residents surrounding the lake.

Landscape Character and Amenity:

Lake Hawea is notable for its scale, largely undeveloped mountain context, dramatic vistas, and clear and attractive water quality and colour. The lake provides an important recreation resource, for swimming, kayaking, boating, fishing, and similar activities and serves as a key part in the identity of Hawea and the wider Wanaka area. It is also a tourist destination. The Te Araroa Trail passes along the southern edge, with various other biking and walking trails along the periphery of the lake. The only state highway connection between central lakes and the west coast, which is used predominantly by tourists, runs for many kilometres alongside the lake. The lowering of lake levels will have an impact on this outstanding landscape vista's experienced while travelling this road.

The proposed decrease to the operating level would see an increase to the exposed gravel beaches along the perimeter of the river and an increase in the distance from the lake edge to the water, affecting the perceived 'fullness' of the lake. Contact Energy has engaged Isthmus to provide a Landscape and Natural Character Effects Summary Report, which specifically addresses the effects anticipated from the change in operating level. Within the report, Isthmus argue that the lake is already subject to an 8m vertical variance, with the addition of a further 2m increasing the visual effect, however, noting that this is not a new effect. However, under certain electricity conditions the lake level could reduce by a further 8m below current normal operating level. This will be noticeable, and it is critical that appropriate consideration is given to these adverse effects upon the significant Natural Landscape associated with the lake and shoreline.

Managers signoff



David Wallace

General Manager Planning and Development
Queenstown Lakes District Council

21 August 2025

- **Appendix 1 – Elected Member Comment – Cr Niki Gladding**
- **Appendix 2 – Elected Member Comment – Cr Lyal Cocks**
- **Appendix 3– Elected Member Comment – Cr Cody Tucker**

Fast Track Approvals Act 2024- Individual Elected Member Statement

COUNCIL REFERENCE NUMBER: FTRA2503

SUMMARY OF APPLICATION

The proposal seeks to adjust generation capacity and increase Lake Hāwea's critical energy storage levels to better manage dry year risks, which involves lowering the lake levels.

The lake is currently consented to operate between **346–338 metres above sea level (masl)**, with contingent storage down to **336 masl**.

The proposed consents would:

- Lower the normal minimum operating level to **336 masl**.
- Enable emergency contingent storage to between **330-333 masl** during emergency conditions determined by the system operator, Transpower New Zealand

SUMMARY OF INFO PROVIDED WITH APPLICATION

1. Application form and Proposal Description
2. Record of Title
3. Landscape Report
4. Ecological Report
5. Letter from Te Rūnanga o Ngāi Tahu
6. Response to Request for Information from Ministry for Environment

IMPORTANT INFORMATION REGARDING THIS ELECTED MEMBER STATEMENT

1. Statements are an elected member's personal views and these do not constitute a collective decision or position of the Council. Discussions with constituents may have assisted to form this view.
2. The statement is an opinion and not put forward as expert evidence.
3. The statement is intended to assist EPA following an invitation for commentary.

ELECTED OFFICIAL NAME – NIKI GLADDING

ELECTED OFFICIAL STATEMENT:

Thank you for the opportunity to submit.

This is an application for a referral and I'm commenting on that basis. My position is that this proposal should not be able to use the Fast Track process and therefore should not be referred. I'll set out my reasons below.

1. From a technical standpoint, this proposal may not meet the s22(1)(a) criteria – being that the project is an infrastructure or development project. Subsection 1(a) is referred to throughout section 22 of the Act and it suggests the use of space (land) is expected, while also making it clear (at s22(7)) that aquaculture projects are captured by s22(1)(a).

This project explicitly states (at 3.8.4.1 and elsewhere) that *no construction is required* for the Project. It is merely a variation of a consent allowing CHS to take more water *that is already stored*.

2. Secondly, the ORC has noted that the taking of the water may impact the recharge of the Hāwea Aquifer. If this is the case, many other users of water including QLDC and a number of small residential water suppliers at Hāwea Flat (who are all subject to legislative requirements to provide water) will be affected. Primary producers with their own consents to irrigate land may also be impacted. Of those parties, only QLDC has been asked for comment. The effects (costs to the community and the district) could be significant - from a financial, economic, and social perspective. The use of property may be impacted. To properly understand these effects would require hearing evidence from all affected parties and therefore a normal consenting pathway under the RMA would be more appropriate. I think it's important to note that the provision of drinking water is critical to life – the resilience and security of those existing systems and consents should never be put at risk to protect a lifeline utility of somewhat lesser importance. The precautionary principle should be applied and it's application necessitates a slower process allowing for greater input from all affected parties.
3. In addition, the effects of lowering lake levels will have dust, amenity, and recreational effects that will impact both locals and our tourism industry. The decision-maker should hear from the people whose businesses, properties, and health may be affected.
4. The application is also likely to be at odds with the NPSFM – noting policies 11, 15, 8, 9, and 10.
5. In terms of the delay that a process under the RMA might create for this proposal, I think it's important to note that whether or not consent has been granted, the water is already stored in Lake Hāwea. The resource, the stored, energy exists right now – it's just not available in normal circumstances. But if we were to have an electricity shortage that could be defined as an 'emergency', s330(1)(ca) RMA may be available to the lifeline service provider i.e. they may be able to drop the lake level without consent for a period in order to resolve the 'emergency'. It's also worth highlighting that according to the application, the use of existing, consented, contingency storage (i.e. below 338 masl) has not been used in 40 years.

Please do not refer this project – there are too many unknowns, the timeframes are inadequate, and the consultation opportunities are just too limited. As a result, the risks are too high. The RMA has adequate processes in place.

Note: All comments will be made available to the public and the applicant when the Ministry for the Environment proactively releases advice provided to the Minister for the Environment.

Fast Track Approvals Act 2024- Individual Elected Member Statement

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ELECTED OFFICIAL NAME – LYAL COCKS

ELECTED OFFICIAL STATEMENT:

Based on feedback from the Community and historical experience, there is a strong message to be taken account of when assessing this proposal.

All the input I have received from concerned residents oppose the reduction in lake level for the following reasons:

1. Will lead to increased sedimentation, dust emissions, and loss of habitat for wetlands species.
2. The viability of swimming, boating, fishing and walking activities will be reduced.
3. Visual appeal of the lake will be diminished impacting tourism, property values and businesses that rely on the lake's health.

4. Loss of Lake Hāwea contribution to the aquifer resulting in bores drying up and depleting access to water for farmers and residents in the Hawea area. The Lake Hāwea town supply is drawn from the Hawea aquifer near the southern foreshore of Lake Hāwea.

I urge the panel to carefully consider the possible adverse impacts of this proposal taking account of the strong public opposition, and seek/refer to relevant technical advice/evidence when determining the outcome for this proposal.

Note: All comments will be made available to the public and the applicant when the Ministry for the Environment proactively releases advice provided to the Minister for the Environment.

Fast Track Approvals Act 2024- Individual Elected Member Statement

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SUMMARY OF INFO PROVIDED WITH APPLICATION

13. *Application form and Proposal Description*
14. *Record of Title*
15. *Landscape Report*
16. *Ecological Report*
17. *Letter from Te Rūnanga o Ngāi Tahu*
18. *Response to Request for Information from Ministry for Environment*

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9. The statement is intended to assist EPA following an invitation for commentary.

ELECTED OFFICIAL NAME – CODY TUCKER

ELECTED OFFICIAL STATEMENT:

My name is Cody Tucker, I'm a councillor for Queenstown Lakes District Council and a Lake Hāwea resident. I submit this statement to express the serious concerns on behalf of my community regarding Contact Energy's proposal to lower the operating levels of Lake Hāwea through the Fast Track Approvals process.

This proposal seeks to reduce the normal minimum operating level of Lake Hāwea from 338 masl to 336 masl, and in emergency conditions, as low as 330 masl.

As someone who reads an enormous amount of reports and government documents, I will keep this statement refreshingly brief.

We take great pride in our lake and recognise the dam's important role in New Zealand's energy resilience. With consideration, this application represents a significant and largely irreversible trade-off of community wellbeing, environmental integrity and water security for short-term generation and commercial gain.

Due to the lack of alternatives presented and the proposal seeking to shortcut due process, it would be fair to assume this application is more opportunistic than strategic.

As this statement will be supported by detailed technical evidence from QLDC, I'll focus on sharing the high-level themes. Being that local stakeholders and affected parties won't have an opportunity to comment on this referral application, I will help highlight the concerns that you will discover if this proceeded to a substantive application.

You will learn, through the lived experience of our residents, that exposing more lakebeds will stir up severe dust storms, throwing fine sediment and silica into the air. Half stripped trees illustrate the strength of Hawea's prevailing winds, posing real consequences for respiratory health among residents.

You will learn through discussion with the Angling Club, the environmental damage this would cause to the lake's ecosystems. The collapse of littoral habitats, harm to native fish and bird life, and long-term degradation of the lake's quality and clarity that defines the beauty of this place.

And you will learn, through the Lincoln Agritech modelling, that lowering Lake Hāwea any further from existing limits will risk disconnecting it from the groundwater system that supplies fresh water to our homes and farms, on private and public schemes.

This is all before we even consider the more obvious consequences the community would be asked to live with. The loss of recreational access and the degradation of stunning natural beauty, both of which underpin our way of life and draw thousands of visitors to this iconic part of New Zealand. This is a matter with far-reaching ecological and social implications. As a fast growing community, the people of Hawea have patiently gone without many things and ask for very little.

It should not be asked to bear these costs.

Your written comments on a project under the Fast Track Approvals Act 2024

Project name	Clutha Hydro Scheme – Increasing Flexibility and Security of Electricity Supply Project
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All sections of this form with an asterisk (*) must be completed.

1. Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
Organisation name (if relevant)	Otago Regional Council		
*First name	Joanna		
*Last name	Gilroy		
Postal address	70 Stafford Street Private Bag 1954 Dunedin 9054		
*Contact phone number	s 9(2)(a)	Alternative	0800 474 082
*Email	s 9(2)(a)		

2. Please provide your comments on this application
If you need more space, please attach additional pages. Please include your name, page numbers and the project name on the additional pages.

Note: All comments will be made available to the public and the applicant when the Ministry for the Environment proactively releases advice provided to the Minister for the Environment.

Thank you for your invitation to provide written comments on the application for referral of the Clutha Hydro Scheme – Increasing Flexibility and Security of Electricity Supply Project under the Fast-track Approvals Act 2024. This application was reviewed by elected members delegated to participate in the fast-track process and teams across the Otago Regional Council (Council). Please see below comments on this application.

Query 1 - Clutha Hydro Scheme Consents:

The applicant already holds resource consents issued by Otago Regional Council to operate the Clutha Hydro Scheme, including resource consent to dam Lake Hāwea (Consent No. 2001.383). The applicant intends to use the fast-track process to apply for new consents in addition to

variations of current consent conditions, to ensure that current consent conditions do not conflict with the proposed new consents. Please provide information on how the relationship between the proposed new consents and the proposed variations to current consent conditions may be affected, including an explanation on why the proposed new consents would be required in addition to the variations.

Response:

Contact Energy Ltd (Contact) holds resource consent 2001.383 to dam Lake Hawea for the purpose of storing water in Lake Hawea.

Condition 9 of this consent specifies lake levels. Specifically, 9(b) specifies the minimum operating level under normal circumstances, 9(c) specifies the time period for the lake to be returned to the minimum lake level, and 9(d) specifies the absolute minimum lake level.

Condition 9 of 2001.383

- a) *The normal maximum operating level for Lake Hawea shall not exceed 346 m above datum (based on a 3 hour rolling average), as measured at the Hawea Dam site (Site No. 75288), except when a higher lake level is required either by the Clutha Flood Rules Version 1 (if still operative) or in order to implement the Flood Management Plan.*
- b) *The normal minimum operating level for Lake Hawea shall not decrease below **338 m** above datum (based on a 3 hour rolling average), as measured at the Hawea Dam site (Site No. 752 88), at any time except as required to ensure dam safety or when the Electricity Commission (or any statutory body exercising like powers and functions to the Electricity Commission) determines that reserve generation capacity (such as that currently located at Whirinaki) should generate electricity.*
- c) *The Lake shall be returned to its minimum operating level of 338 m above datum as soon as possible after the dam safety issue is resolved or when the the Electricity Commission (or any statutory body exercising like powers and functions to the Electricity Commission) determines that operation of reserve generation capacity (such as that currently located at Whirinaki) is no longer required.*
- d) *The lake level shall not decrease below **336 m** above datum (based on a 3 hour rolling average), as measured at the Hawea Dam site (Site No. 75288), at any time.*
- e) *Under flood flow conditions, the level of the lake shall be managed in accordance with the Clutha Flood Rules Version 1 (if still operative) or the Flood Management Plan.*

Contact seeks to vary Condition 9 to remove reference to the minimum lake levels and return period in Condition 9. Contact has proposed that Condition 9 reads as follows (additions in **red** and deletions struck out):

- a) *The normal maximum operating level for Lake Hawea shall not exceed 346 m above datum (based on a 3 hour rolling average), as measured at the Hawea Dam site (Site No. 75288), except when a higher lake level is required either by the Clutha Flood Rules Version 1 (if still operative) or in order to implement the Flood Management Plan.*
- b) *The normal minimum operating level for Lake Hawea shall **be undertaken in accordance with Condition [x] of Consent No. [insert consent reference]** ~~not decrease below 338 m above datum (based on a 3 hour rolling average), as measured at the Hawea Dam site (Site No. 752 88), at any time except as required to ensure dam safety or when the Electricity Commission (or~~*

~~any statutory body exercising like powers and functions to the Electricity Commission) determines that reserve generation capacity (such as that currently located at Whirinaki) should generate electricity.~~

- c) ~~The Lake shall be returned to its minimum operating level of 338 m above datum as soon as possible after the dam safety issue is resolved or when the the Electricity Commission (or any statutory body exercising like powers and functions to the Electricity Commission) determines that operation of reserve generation capacity (such as that currently located at Whirinaki) is no longer required.~~
- d) ~~The lake level shall not decrease below 336 m above datum (based on a 3 hour rolling average), as measured at the Hawea Dam site (Site No. 75288), at any time.~~
- e) Under flood flow conditions, the level of the lake shall be managed in accordance with the Clutha Flood Rules Version 1 (if still operative) or the Flood Management Plan.

By doing the above, this would remove reference to minimum lake levels from the existing resource consent 2001.383 to dam Lake Hawea.

Contact also seeks resource consent under Rule 12.3.4.1 of the Regional Water Plan to dam Lake Hawea. Contact intends that this consent would relate to and provide for the proposed minimum lake levels only.

Contact Energy Ltd intends that 2001.383 and the new consent would operate in conjunction with each other.

As discussed in the Applicant's response dated 10 July 2025 to the Ministry for the Environment's request for information, the Applicant seeks a new consent for the proposed reduction in minimum lake level as the activity is not within the scope of a variation under s127 of the Resource Management Act.

Council agrees with Contact's conclusion that the proposed reduction in minimum lake level could not be a variation under s127 of the Resource Management Act and that a new consent would be required. However, for an application where s127 cannot be utilised, Council would ordinarily expect that the new consent being sought would relate to the activity as a whole, rather than a single aspect of the activity. Therefore, in this case, Council would have anticipated an application to replace the existing resource consent 2001.383 to dam Lake Hawea in its entirety.

Therefore, Council considers Contact's approach to be unorthodox. However, Council is not aware of any principle that would make this approach unlawful. Also, the application would still allow for a full consideration of all relevant adverse effects associated with the proposed reduction in minimum lake levels. The two consents are proposed to be utilised in conjunction with each other. In terms of implementation, Council sees no issue with this in principle. However, Council has not been provided with any draft conditions for the proposed new consent. Careful consideration would have to be given to the relationship between conditions to ensure there is no conflict between specific conditions in the two consents.

Query 2 - Competing Applications

Any applications that have been lodged with the Council that would be a competing application or applications if a substantive application for the project were lodged. If no such applications exist, please provide written confirmation.

Response:

There are no competing applications.

Query 3 – Existing Resource Consents

In relation to projects seeking approval of a resource consent under section 42(4)(a) of the Act, whether there any existing resource consents issued where sections 124C(1)(c) or 165ZI of the Resource Management Act 1991 (RMA) could apply, if the project were to be applied for as a resource consent under the RMA. If no such consents exist, please provide written confirmation.

Response:

165ZI: There are no such consents.

124C(1)(c): There are no such consents.

Other Matters

Council held a pre-application meeting with Contact regarding the proposed activity on 12 May 2025. The meeting minutes for the meeting dated 4 June 2025 are attached as Appendix 1. The details of the meeting minutes are not replicated in this letter and this letter should be read in conjunction with the minutes.

We also wish to reiterate the following key points relating to hydrology, ecology and natural character of Lake Hawea and the Hawea River:

- The Applicant needs to give appropriate consideration to the effects of the proposed operating regime changes on surface water hydrology of the Hawea River.
- Proposed lake levels may cut off the Hawea Irrigation Company water take and could affect the irrigation company's supply in irrigation season.
- There is a recognised strong connection between Lake Hawea and the Hawea aquifer, as highlighted by the 2023 groundwater modelling work (Lincon Ag). The aquifer is key for drinking water, domestic supply, town water supply, irrigation, and sustaining wetlands, and at low lake levels aquifer recharge is impeded. Therefore, lowering the lake level is likely to have substantial impact on groundwater availability. The proposed new operating level (down to 330m) would likely see the aquifer disconnected from the Lake and the aquifer level fall significantly. The 2023 groundwater modelling work (Lincon Ag) can be found here → (https://www.orc.govt.nz/media/c3unpjog/hawea-model-additional-information-2021-final_github_readmes.pdf).
- The Applicant needs to give appropriate consideration to impacts on Regionally Significant Wetlands (Campbells Reserve Pond Margins and Butterfield Wetlands), which may be affected by changes to surface water hydrology of Hawea River, and to hydrological changes to groundwater aquifers, which affect wetland extent and condition.
- The Applicant needs to give appropriate consideration to impacts on freshwater species and the freshwater environments downstream of the Hawea outlet, including from erosion exacerbated by a large, sudden, prolonged water discharge.

- The Applicant needs to give appropriate consideration to impacts on freshwater values in the Hawea River as it may remain in low flow conditions or stay at/near minimum at greater frequency or duration
- The Applicant needs to give appropriate consideration to altered operating regime impacts on freshwater macrophyte communities, including the loss of native dominance through enabling invasion by pest species, for example, by lagarosiphon.
- The Applicant needs to give appropriate consideration to the significance of identified effects on freshwater biota from changes to the operating regime;
 - At risk Birds that nest in the littoral zone
 - Indigenous fish that rely on the littoral zone
 - Fish passage to tributaries
 - Sports fish that rely on the littoral zone for feeding and need access to tributaries for spawning at key times
 - Bryophyte communities that occupy deep lakes are likely to be affected by changing conditions.
- Impacts of dust/silt mobilisation from the exposed lakebed on air quality in Hawea and surrounding areas.

We also wish to highlight that the proposed activity has generated interest in the local community, members of which have expressed concerns to Council. In particular, the Guardians of Lake Hawea, community water suppliers in Hawea including the Kane Road Utilities Society Incorporated; and Upper Clutha Angling Club have directly contacted Council to express concerns. Broadly speaking, the issues raised relate to natural character, aquatic ecology, amenity, impacts on registered drinking water supplies, water quality, recreational values, hydrology and groundwater.

Council have also been contacted by Taumata Arowai about its role under Section 35A of the Water Services Act 2021 and the implications of the proposed project on drinking water and potential contamination of the aquifer. If lake levels are lowered, Taumata Arowai have noted that this may affect the contamination profile of aquifers.

Summary

Council's view is that consultation to date has not been adequate with limited opportunity for information exchange or detailed discussion. This has limited the comments that can be provided. Key uncertainties remain over the scope of the proposal. Council has pathways available for engagement and consultation.

We also note that Council's comments to date have focused on Lake Hāwea, as that is the scope of the current application. However, discussions at the pre-application meeting covered the wider Clutha system, including flows and levels at Clyde and Roxburgh.

Contact Energy identified potential adverse effects at Hāwea including lower lake levels, visual amenity impacts, dust, effects on salmonid spawning, benthic species, irrigation supply, groundwater access, and recreation. However, they provided no supporting technical assessment to quantify or confirm these effects.

Council staff have identified additional potential impacts, including cultural effects, minimum flow changes in the Hāwea River, drinking water quality, ecological impacts, amenity, and public access.

Of particular concern are risks to groundwater, hydrology, and freshwater ecology, all of which require robust technical evidence before conditions can be evaluated.

While the community has no ability to determine whether this proposal proceeds via a fast-track process, there is significant public interest and concern, as would be expected for a proposal of this nature. Without a full understanding of the proposal's scale or potential impacts, it is difficult for Council to appreciate the implications.

Appendix 1 Documents:

RM25.185 Pre-application letter 4 June 2025

RM25.185 Pre-application letter 4 June 2025 - Appendix 1 - Hawea Basin groundwater - summary and recommendations 2023

File: RM25.185

Date: 4 June 2025

Sent via email: s 9(2)(a)

Dear Ian,

Pre-Application Meeting Follow up

Thank you for attending a pre-application meeting with the following Otago Regional Council (ORC) staff:

Dwayne Daly – Principal Consents Planner
Martina Courtier – Fast-track Consents Planner
Ben Mackey – Manager of Science
Grace Longson – Transport Planner
Hilary Lennox – Manager of Strategy
Jean-Luc Payan – Manager of Natural Hazards
Kirsten Tebbutt – Engagement, Strategy and Planning Lead
Libby Caldwell – Manager of Environmental Implementation
Melanie Heather – Principal Compliance Specialist
Warren Hanley – Senior Resource Planner Liaison (Policy and Planning)
Scott Liddell – River Engineer
Mike Cummings – Team Leader Compliance
Nathan Anderson – Senior Flood Hazard Analyst
Helen Manly – Team leader Water (Science)
Simone Langhans – Team leader Land (Science and Resilience)
Amir Levy – Senior Groundwater Scientist
Amanda Riddle – Scientist (Hydrology)
Ciaran Campbell – Scientist (Freshwater Ecology)

This letter summarises our advice based on the information presented by you at the meeting held on 12 May 2025. At this stage, the information available regarding your proposal is limited and although we have provided as much useful feedback as possible, it is reflective of the available information.

Background

From documentation and discussions, we understand the key aspects of the project are as follows:

- Contact Energy intend to apply under the Fast-track Approvals Act 2024 for new consents to replace their existing resource consents for the Clutha Hydro Scheme with several changes.
- Initially however, Contact Energy intend to apply separately for the necessary consents related to the operation of the Clutha Hydro Scheme at Lake Hāwea, including to:
 - i. reduce the current normal operating range of Lake Hāwea from 338-346 masl to 336-346 masl; and
 - ii. reduce the minimum allowable lake level when contingent storage is required from 336 masl to 330 masl.

Accordingly, the focus of the meeting and the following feedback focuses on reduced lake levels at Hāwea rather than on the Clutha Hydro Scheme as a whole or any changes to the operation of the scheme.

- In terms of adverse effects, Contact noted the following potential adverse effects of reducing the current normal operating range of Lake Hāwea from 338-346 masl to 336-346 masl as:

Lower lake levels impair visual amenity, can lead to dust issues, potential to impact salmonid spawning runs, delayed refilling of lake (more water required to refill if lake draw down increased), potential impacts on irrigation water supply to race, concerns on access to groundwater raised as lowering the lake level may lower groundwater levels.

And reducing the minimum allowable lake level when contingent storage is required from 336 masl to 330 masl as:

Lower lake levels impair visual amenity, can lead to dust issues, potential to impact salmonid spawning runs, potential impact on benthic species, delayed refilling of lake (more water required to refill if lake draw down increased), potential impacts on irrigation water supply to race, concerns on access to groundwater, recreational access to lake

Other than noting these potential adverse effects, no assessment or supporting information (e.g., technical assessments) relating to adverse effects were presented to council at the pre-application meeting.

Otago Regional Council Comments and Feedback

Resource Consents Team

Contact hold the following consents relating to the damming of Lake Hāwea at the outlet to the Hāwea River.

2001.383	Water Permit to Dam	25 May 2042
2001.384	Water Permit to Dam	25 May 2042

2001.389	Water Permit to Divert	25 May 2042
2001.392.V6	Discharge Permit	25 May 2042
2001.395	Discharge Permit	25 May 2042
2001.399	Water Permit to Take & Use	25 May 2042

Condition 9(b) of Water Permit 2001.383 specifies the normal minimum operating level for Lake Hāwea:

- b) The normal minimum operating level for Lake Hāwea shall not decrease below 338 m above datum (based on a 3 hour rolling average), as measured at the Hāwea Dam site (Site No. 752 88), at any time except as required to ensure dam safety or when the Electricity Commission (or any statutory body exercising like powers and functions to the Electricity Commission) determines that reserve generation capacity (such as that currently located at Whirinaki) should generate electricity.*

Condition 9(d) of Water Permit 2001.383 specifies the minimum level for Lake Hāwea:

- d) The lake level shall not decrease below 336 m above datum (based on a 3-hour rolling average), as measured at the Hāwea Dam site (Site No. 75288), at any time.*

Council's recommending report for 2001.383 (and associated consents) notes that:

- Prior to hydro development Lake Hāwea extended an average of 5 kilometres in width, 20 kilometres in length and had a natural (recorded) lake level range of 4.16 metres (ranging from 325.38 masl to 329.56 masl). The lake covered an area of 115 square kilometres.
- The Hāwea Control Structure was built at the natural lake outlet during 1954 to 1958. The Hāwea Dam is a 30-metre high (crest level of 351.4 masl) earthfill dam designed to give effective control of the lake level over a range of 21.65 metres;
- The Hāwea Control Structure was commissioned in 1958 and lake fill was completed in 1959. The lake level was raised by 15.2 metres to 342.9 masl.
- Between 1958 and 1980, the lake operated with a maximum level of 346.76 masl and a minimum level of 327.7 masl.
- From 1980 to the granting of the above consents, the lake level was between 340 to 346 masl 90% of the time; in the flood range of 346 masl to 349.05 masl 5% of the time; between 338 to 340 masl 4% of the time; and, between 336 to 338 masl 1% of the time.

The existing consents relating to the Clutha Hydro Scheme at Lake Hāwea were granted under the following rules:

- Surface Water Takes – Rule 12.1.5.1
- Damming and Diversion – Rule 12.3.4.1
- Discharge of water – Rule 12.12.1.1

Council also determined that land use consents were not required under Section 13 of the Act as the continued use of the dam structures themselves on the riverbeds were considered to be permitted under the Regional Plan Water. A Certificate of Compliance was issued with respect to Rule 13.1.1.1 of the Regional Plan Water for these activities.

1. Consent Requirements

The following rules of the Regional Plan Water are applicable for the operation of the Clutha Hydro Scheme at Lake Hāwea:

- Surface Water Takes – Rule 12.1.5.1
- Damming and Diversion – Rule 12.3.4.1
- Discharge of water - Rule 12.12.1.1 was repealed and replaced on 1 May 2014. The applicable permitted rules are therefore Rule 12.B.1.10, Rule 12.B.1.11 and discretionary Rule 12.B.4.3

The Applicant would need to provide an assessment of effects in relation to the above rules. Overall, the activity would be a **discretionary activity**.

Land use consent would not be required under Section 13 of the Act as the continued use of the dam structures themselves on the riverbeds are considered to be permitted under Rule 13.1.1.1. of the Regional Plan Water. The Applicant could opt to seek a Certificate of Compliance accordingly.

2. Consultation

Council anticipates that Contact will undertake consultation with all relevant statutory and non-statutory stakeholders, including the community and that details of this consultation will be included in the application.

3. Assessment Matters

Matters that would need to be considered in an assessment of effects would be:

- Hydrology / Flooding (including erosion, sedimentation and land instability)
- Natural Hazards
- Freshwater Ecology
- Surface Water and Groundwater Quality and Quantity (including other water users) and Aquifer Levels.
- Natural Character and Amenity (including dust)
- Recreational Use
- Cultural Values
- Heritage Values
- Adjacent land uses

Permitted Baseline and Existing Environment

As changes to the consented activity (reduced lake levels) are proposed, the Applicant would need to apply for new consents, rather than consents to 'renew' the existing consents.

Council's decision on the application for the current consents explored the appropriate environment against which to assess the effects of the activity was not the pre-dam environment. Rather, as the dam structures themselves do not require resource consent, the environmental effects were considered on the basis that the environment included the dam structures.

As the dam structures remain a permitted activity under the Regional Plan Rule, Council considers this to be the case. However, the Application would need to clearly identify the Permitted Baseline for the activity and the Existing Environment so that the adverse effects are considered appropriately. It would be helpful to have further discussion with the Applicant regarding these matters prior to any technical reports being completed as the Permitted Baseline and the Existing Environment create the basis for these assessments.

Statutory Acknowledgement Areas

Lake Hāwea is a Statutory Acknowledgement Area. The application should outline any engagement with mana whenua, including feedback from mana whenua. The application should also identify any sites of cultural significance to mana whenua. Please also assess the extent to which the proposal aligns with iwi values and consider including a Cultural Impact Assessment.

Consideration will need to be given to the relevant Iwi Management Plans.

Objectives and Policies

The application will also need to provide a fulsome assessment of the relevant objectives and policies in the regional planning documents as well as all relevant national direction.

Science Team

Groundwater

Groundwater is a key component for domestic/drinking water consumption and agriculture in the Hāwea basin. Council commissioned a model to investigate groundwater in the basin in 2023. One of the main findings was the very strong connection between lake and groundwater levels, with the lake identified as a main source of recharge to the aquifer. The model also suggests the presence of a low permeability layer around the dam/terminal moraine that can impede groundwater flow to the aquifer if lake levels fall below a certain threshold. Such an occurrence will effectively cut off groundwater flow to the aquifer, adversely affecting bore users, community supplies, and irrigators. There are lots of uncertainties regarding this, but the model suggested a range of between 327 and 337m. Therefore, the proposed lowering of the lake levels further are likely to have substantial impact on groundwater availability in the

Hāwea area, Figure below shows current water abstraction near the Hāwea dam. Attached as Appendix 1 is a memo that summarises the modelling work.

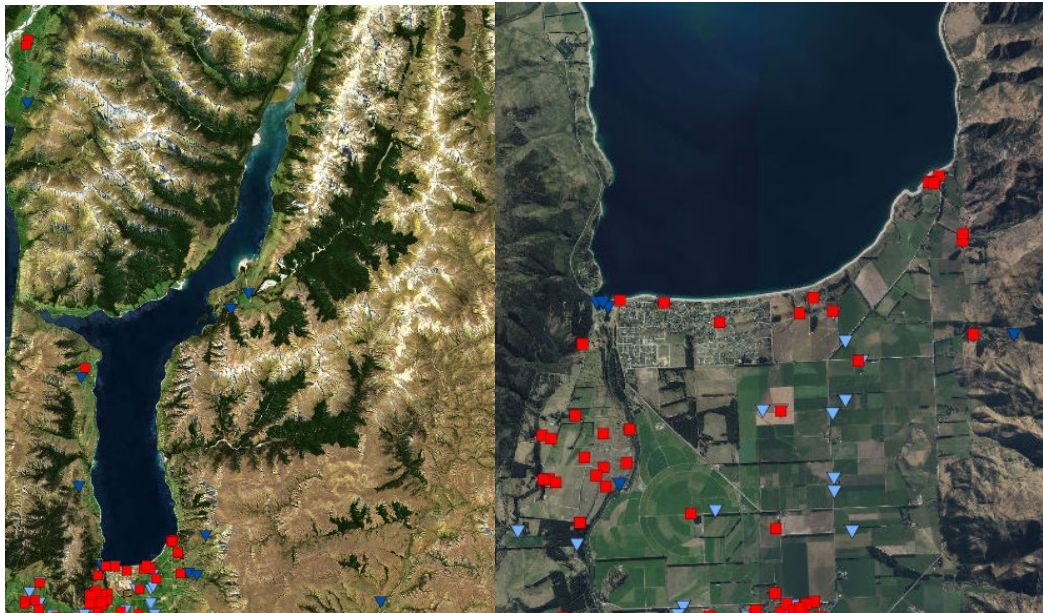


Figure 1. Bores and water takes in the general vicinity of Lake Hāwea (Source: Otago Maps)

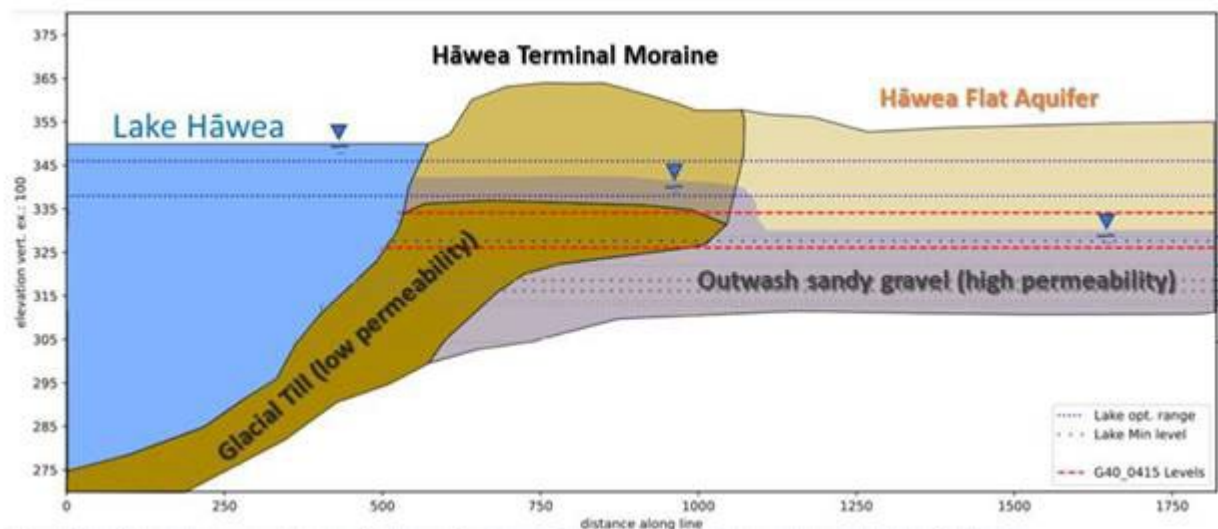


Figure 2: North to south cross section of Lake Hāwea. Hāwea terminal moraine and the downstream outwash Hāwea Flat Aquifer.

Hydrology

Depending on the magnitude, frequency and duration of the draw down of the lake to the proposed levels, the Hāwea river may potentially sit closer to minimum flow conditions for longer time frames. This has the potential to have an impact on ecology/biodiversity in the Hāwea River.

The proposed lake levels may cut off the Hāwea Irrigation Company water take from Lake Hāwea as the siphon is at about RL 336.5m. If the timing of lake drawdown to below this level

occurs during irrigation season (approx. September to Mid-May), this will likely cut off the Hāwea Irrigation company's supply.

Please note these comments only relate to the proposal to change Lake Hāwea operating lake levels, not the minimum flow changes at the Clyde and Roxburgh Dam mentioned in the meeting.

Freshwater Ecology

Ecological concerns for the effects of these activities centre around the magnitude, frequency, duration, and timing of water level fluctuations. These concerns include:

- General effects to the littoral flora and fauna that has developed a new “natural” state to cope with the current operating regime.
- The impact on aquatic habitats for macrophytes, as it appears the current operating regime favours native macrophytes and may be preventing or reducing the risk from the invasive Lagarosiphon (*Lagarosiphon major*). There is the potential that alterations to operating regimes shift the aquatic plant community, including to one which is dominated by invasive weeds.
- The impact on bryophyte communities known to inhabit the deep oligotrophic lakes of Otago, which are affected by light penetration, turbidity, and sedimentation.
- The impact to birds which nest and feed in the lake or in the littoral zone, notably the pūteketēke/Australasian crested grebe (*Podiceps cristatus australis*, Threatened – Nationally Vulnerable, and Threatened – Regionally Vulnerable), which has been recently observed nesting in Lake Hāwea.
- The impact to indigenous freshwater fishes and invertebrates which rely on the littoral zone for feeding or spawning, including tuna/longfin eel (*Anguilla dieffenbachii*), koaro (*Galaxias brevipinnis*), kākahi/mussels (*Echyridella menziesii*), and common bully (*Gobiomorphus cotidianus*).
- The impact on connectivity of the lake to tributaries for indigenous freshwater fishes and invertebrates (i.e., fish passage).
- The impact on sports fish which rely on the littoral zone of Lake Hāwea for feeding, and require access to spawning habitats in tributary creeks at key times.
- The impact on freshwater species and the freshwater environments downstream of the Hāwea outlet, including from erosion exacerbated by a large, sudden, prolonged water discharge.
- The impact on freshwater values in the Hāwea River as it may remain in low flow conditions or stay at/near minimum flow at greater frequency or duration.

Although these concerns have been identified, it is difficult to discern the scale of effects and mitigations proposed (if any). Without specifics in terms of operating regimes and possible effects, it remains difficult to propose recommendations for resolving the concerns above. It would be helpful have a copy of any ecological assessments or assessment of effects,

including those undertaken by Dr Greg Ryder (as briefly mentioned in the meeting), to assist with future discussions.

Natural Hazards Team

From a flood hazards perspective, the proposed operational changes to Lake Hāwea will likely have negligible impacts. The lower water levels in the lake could actually provide a benefit by creating additional flood storage should a flood event occur when the reservoir is low.

Environmental Implementation Team

The Lake Hāwea community are in the process of developing a catchment action plan for the area. The applicant may like to consider how their application aligns with the community aspirations for the lake.

Council would like to know what freshwater biosecurity measures will be undertaken as part of this proposal.

Compliance Team

No areas of non-compliance were raised. Council would appreciate the opportunity to review proposed conditions of consent.

Policy and Planning Team

General comment

- The original decision on flows and level for Clutha hydro scheme consents was about 20 years ago, and
- There may be more evidence available now than at hearing on the impacts of different level/flows on values i.e. natural character, and there may also be other values to consider.

The ORC Policy Team has commissioned two studies on the Clutha Mata-Au and associated source and hydro-lakes since then:

- A Natural Character study
- A Recreational Values study

These were presented to the Policy Committee in November 2018.

Engineering Team

Engineering does not have any feedback on what we understand the proposal to be at this stage. That may change in the future if the scope of the application alters, but we are happy to provide no specific feedback at this stage.

Conclusion

It is noted that this information has been provided based on discussion of information provided by you about your proposal and therefore there may be other requirements identified once your application is lodged.

Consultation for this proposal, as required under s.11 of the Fast-track Approvals Act 2024, has been inadequate to date. To provide more meaningful feedback on this proposal, additional information sharing and opportunity for discussion would be required.

If you have any queries or require clarification on the information provided please contact me on 0800 474 082 or by emailing [s 9\(2\)\(a\)](#)

The costs related to this service include but are not limited to; administration, research, meeting time, taking minutes, distribution of meeting notes, and question follow ups. 30 minutes of work carried out by the Consents Officer is free of charge. The remaining work is charged at the relevant officer's hourly rate in accordance with the fees and charges schedule which can be found [here](#).

Yours sincerely



Alexandra King
Manager Consents

MEMORANDUM

To: Tom De Pelsemaeker (Policy Water & Land TL)
From: Amir Levy, Sam Yeo, Marc Ettema (Groundwater Scientists)
Date: 03 October 2023
Re: Hāwea Basin groundwater report (May 2023) – summary & recommendations for Policy

1. Introduction

This memorandum summarises the main Policy recommendations stemming from Lincoln Agritech's Hāwea Basin transient numerical groundwater flow modelling report (LAL, 2023). ORC commissioned LAL to develop a model for the Hāwea Basin, which expanded the knowledge from the existing steady state model (Wilson, 2012). The 2023 model incorporated time series data collected after the completion of Wilson (2012), who recommended this further monitoring. The contribution of this time series data to the 2023 model clearly illustrates the benefits of dedicated continuous monitoring for understanding, modelling, and managing Otago's aquifers.

The new transient model aimed to help address the following key management issues for the basin:

- whether the aquifers/groundwater management zones and allocation volumes identified in Wilson (2012) are still relevant and practical
- sources of groundwater recharge
- groundwater allocation limits
- the impact of groundwater abstraction by competing water demands (irrigation, domestic takes, and town supplies) on water levels
- the impact of groundwater abstraction on river flow and wetlands

The final report (LAL, 2023) was submitted to ORC in May 2023. Although the model has various limitations, it substantially improves the existing information regarding the Hāwea Basin. This memorandum summarises the main findings and provides recommendations for Policy. However, there are several matters that will need further input from Policy and the community (Section 4). Further information and details can be found in the model report (LAL, 2023).

2. Model information & methodology

2.1 Transient modelling

The previous model for the Hāwea Basin (Wilson, 2012) was steady-state, which assumes that the total storage, inflow and outflow processes are constant with time. Conversely, transient models allow the inflows/outflows to vary with time which accounts for changes in storage, pumping, and water levels. Being steady state had significant drawbacks for the 2012 model as it could not simulate and

incorporate seasonal changes in pumping and groundwater levels, e.g. the recovery of groundwater levels during winter, when pumping stops. However, although the model's steady state nature was identified as its main drawback, it was built using the best available information at the time (LAL, 2022), as there was not much continuous groundwater and surface water monitoring data then. Furthermore, it was recommended to install continuous monitoring data in the basin, in order to obtain time series data, which was implemented by ORC. This provided time series data of groundwater levels from new State of Environment (SoE) bores that were installed in 2014/5, water abstraction (metering), and surface water flow from Grandview and Lagoon Creeks. This time series data was then used for the building and calibration of the LAL (2023) new transient model.

2.2 Water use data

Metered groundwater abstraction volumes from consents is a key input parameter for modelling groundwater recharge and levels, as it is a major source of outflow from the aquifer. This data is provided by consent holders to ORC as part of their consent conditions. The data was processed and analysed by Kitteridge (2022). The model used the maximum daily usage and maximum allocated daily volumes combined with the normal intra-annual variability of pumping (i.e. a typological pumping curve), with a calculated integral of 135 days. Hence, current use allocation scenarios based on the pumping curve multiplied the maximum daily usage volume X 135 days. Scenarios that tested increased or decreased allocation were based on the maximum allocated daily, rather than annual, volumes due to limitations in the water metering data. The water metering data was also used to derive the current usage of groundwater in the basin and compare it to the ORC allocations (Table 1). However, as these annual allocation volumes are based on the daily usage and maximum allocated volumes (in contrast to ORC's annual volumes), these differ from ORC's current allocation limits and existing allocation.

Allocation Zone	Maximum daily usage m ³ /day	Annual average usage m ³ /yr	Maximum allocated daily rate m ³ /day	Annual allocation (135 x daily rate) m ³ /yr*	Annual usage as a percent of allocation	Existing allocation limit
Hāwea Flat	18,509	2,446,783	68,472	9,247,500	26.5%	8,680,000
Grandview Zone	0	0	0	0	n/a	n/a
Terrace – River	2,387	303,554	10,136	c	22.2%	1,560,000
Terrace – Hill	174	45,314	1,346	181,710	24.9%	410,000
Sandy Point	56	13,233	233	31,455	42.1%	860,000
Te Awa	0	0	0	0	n/a	297,000
Maungawera Flat	0	0	0	0	n/a	570,000
Camp Hill Moraine	0	0	0	0	n/a	n/a
Maungawera Valley	1,200	130,305	4,696	675,000	19.3%	1,210,000
Butterfield Exclusion	0	0	0	0	n/a	n/a
Campbell's Exclusion	0	0	0	0	n/a	n/a

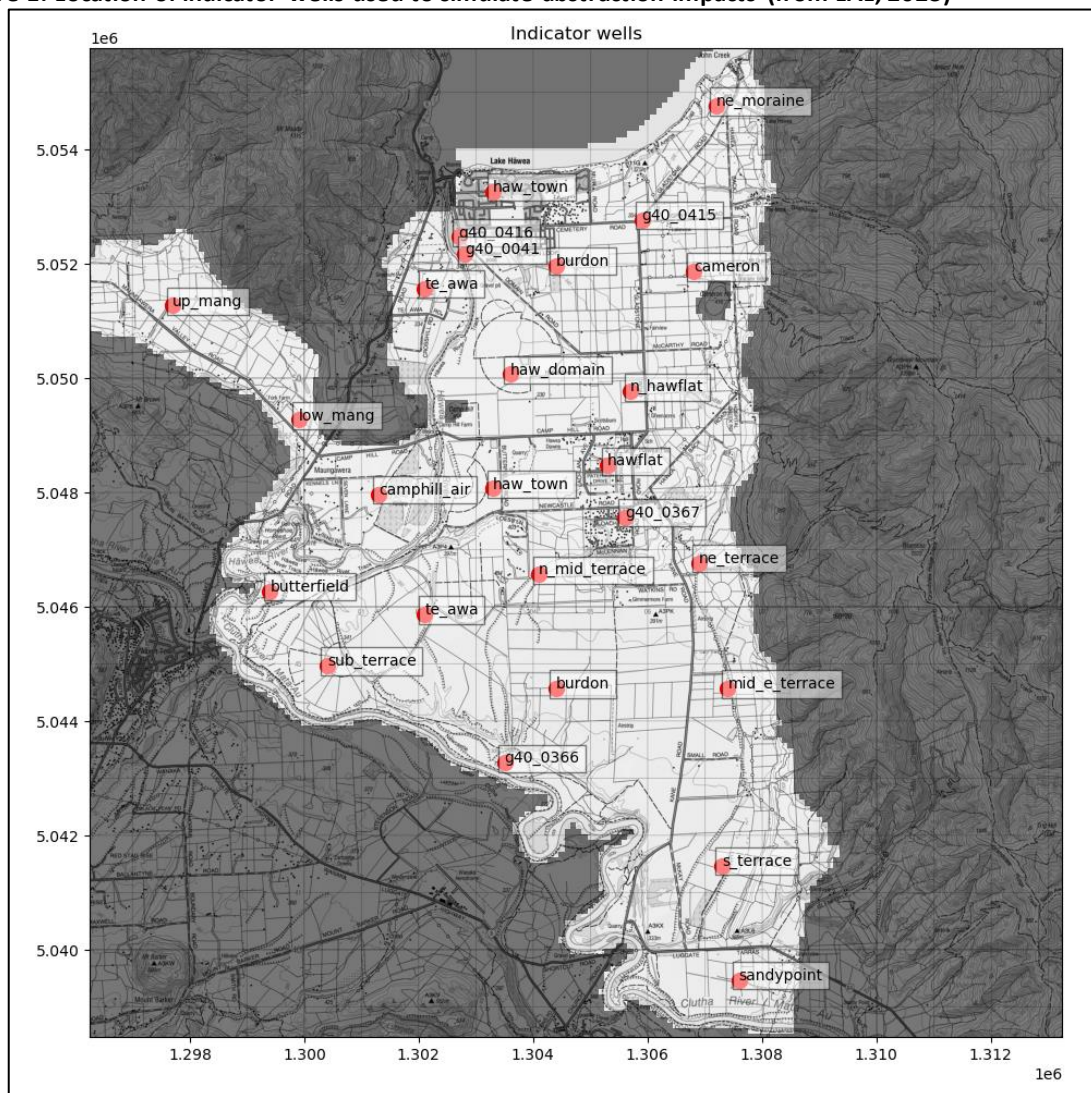
Table 1: Summary of existing zone allocation and estimated usage (from LAL, 2023)

2.3 Modelling scenarios

The impacts of the current abstraction and allocation and changes to them were assessed by numerical groundwater modelling of hydraulic heads (used as proxies for groundwater levels) in several indicator wells across the Hāwea Basin (Figure 1). The model used several abstraction scenarios, of which the most relevant are:

- **long_current scenario** presents the “current state” of abstraction. It is based on the mean weekly abstraction from the water metering data.
- **max_allocation_on_the_pump_curve (MAPC)** is the most realistic scenario for the maximum abstraction that can take place using the existing limits. It is based on the maximum daily allocation applied to the typological pump curve (developed using the metering data)
- **Increased allocation scenarios** – modelled a percentage increase of between 5 and 150% to the existing maximum daily allocation (MAPC) for the Hāwea Flat, Maungawera Flat, Te Awa, and the Terrace zones.
- **Reduction scenarios** were modelled for the Maungawera Flat zone, where the current maximum allocation was reduced by between 5 and 50%

Figure 1: Location of indicator wells used to simulate abstraction impacts (from LAL, 2023)



The results were then used to model the impact of pumping on groundwater levels and the bore users' reliability to access groundwater (bore interference). This was assessed by calculating the bores' adequate penetration depth, i.e. an indication that they are drilled sufficiently deep, calculated as the mean groundwater level in a given site minus three times the average seasonal fluctuation in groundwater level. Hence, an adequate depth must be deeper than this value. The model calculated the proportion of time when groundwater levels (i.e. hydraulic heads) in the bores are below this depth, when bore users' reliability to access groundwater is compromised and they may go dry.

However, some existing bores are likely to be shallower than this depth. The hydraulic heads were compared against adequate bore depths using two pumping scenarios:

- no groundwater pumping abstraction scenario (dryland recharge only) - long_nat
- The average weekly pumping - long_current

3. Results & main recommendations

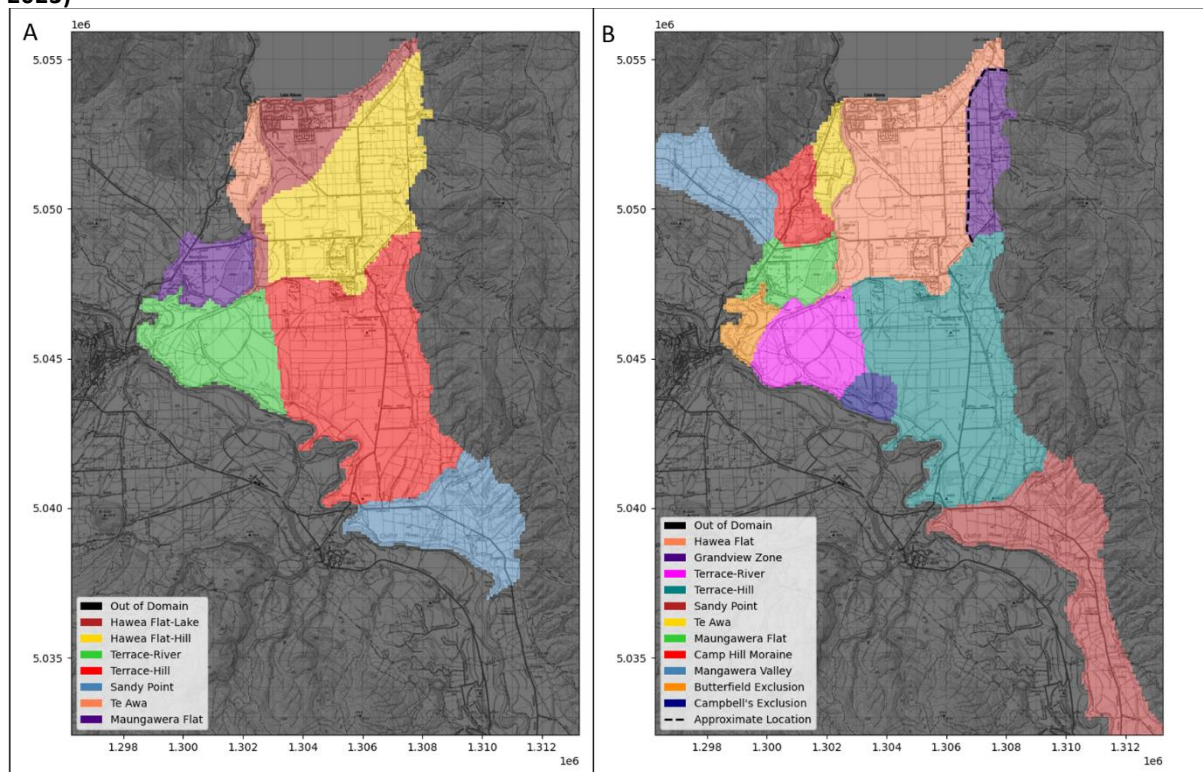
The relevant policy recommendations from the LAL (2023) report are described in the following sections, which also provide various options for allocation based on the modelling. The options are summarised in Table 2.

- 1) Changes to the boundaries and allocation volumes for some groundwater zones in the Hāwea basin (Section 3.1)
- 2) Restricting groundwater abstraction near wetlands (Section 3.2)
- 3) Distinguishing between bores that mainly abstract from surface water (stream depleting) and those that take from the aquifer (Section 3.3)
- 4) Management of Lake Hāwea levels to protect the aquifer (Section 3.4)

3.1. Changes to aquifer zone boundaries & allocation

The report suggested several changes to the existing boundaries and allocation volumes for some aquifers (groundwater zones) within the Hāwea basin. The current and proposed management zones are shown in Figure 2. The updated management zones will be incorporated to the proposed Land and Water Regional Plan (pLWRP). The recommendations for each zone are provided in Table 2.

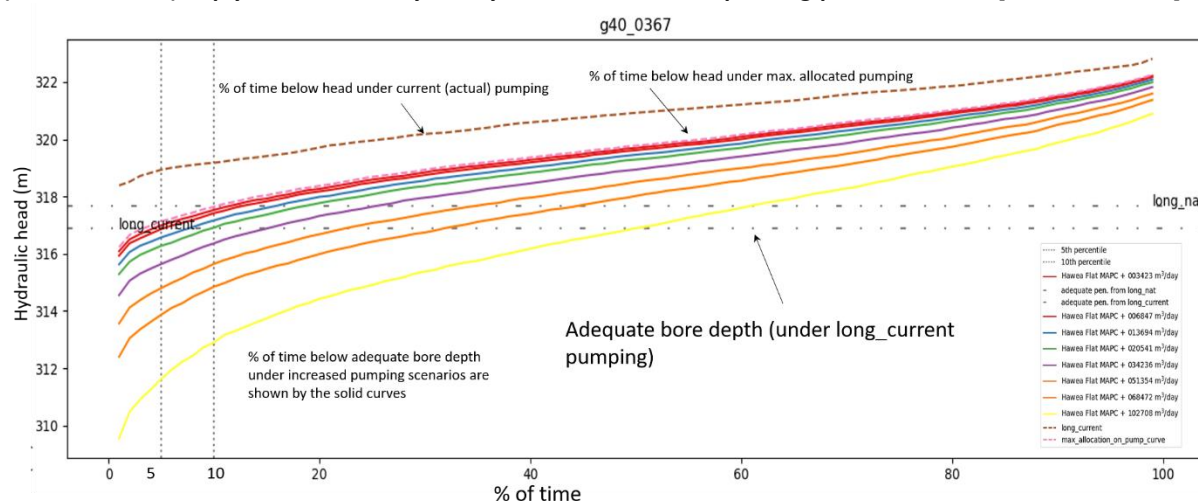
Figure 2: current (A) and recommended (B) groundwater allocation zones in the Hāwea Basin (from LAL, 2023)



a) Hāwea Flat (Lake & Hill) zone

LAL (2023) identified a strong connection between Lake Hāwea and groundwater levels in the existing Hāwea Flat – Hill and Hāwea Flat – Lake aquifers, with the lake providing substantial groundwater recharge. Based on the extent of recharge from the lake to these zones, it was recommended that the two are combined into a new, single Hāwea Flat zone with a proposed allocation based on the current two zones combined, i.e. 8,680,000m³/year. The modelling of current and increased abstraction scenarios suggests that under the current abstraction (i.e., long_current) scenario groundwater levels in Hāwea Flat will not fall below the adequate penetration depths (Figure 3). Conversely, under the current maximum allocation (MAPC scenario) groundwater levels will fall below the adequate penetration depth for around 5% of the time, which reduces reliability of water supply for bore users. The scenarios of increased abstraction (solid horizontal curves) suggested that groundwater levels will be below the penetration depths, hence, reduced reliability, for higher portions of time. For instance, under the increased abstraction scenarios bore G40/0367, situated in Hāwea Flat, will be below the adequate penetration depth between 5 and 50% of the time. It is therefore recommended to carry forward the allocations of the two zones that comprise the newly created Hāwea Flat zone (8,680,000m³/year).

Figure 3: Modelled hydraulic heads & percentile of time below them for bore G40/0367 under current (dashed curves) & increased (solid curves) pumping scenarios. Water levels below the adequate bore depth (horizontal line) imply lower reliability or dry bores for the corresponding portion of time [from LAL, 2023].



In addition to that, the model also suggested that the eastern edge of the basin is disconnected from the main Hāwea Flat zone by a geological fault which is likely to reduce or prevent the hydraulic connection and recharge from the lake. It is therefore recommended to designate this area near Grandview Ridge, north of Hospital Creek and between Hawea Back Road and Timaru Creek Road, as a separate allocation zone (e.g., the Grandview Zone, [LAL, 2023]). However, as there are several significant uncertainties about the location of the fault, the zone boundary and its hydrogeology several management options were suggested:

- Not allocating any groundwater from the zone apart from Permitted Activity (PA) takes
- Allocating no more than 50% of the zone's Land Surface Recharge (LSR), a component of Mean Annual Recharge (MAR), of 787,000m³/year. The approach in the pLWRP is 35% of MAR (or LSR). However, due to the high uncertainties, it is worth considering an even more conservative approach, i.e. a lower portion of LSR.
- Require any potential takes from the Grandview zone that wish to be allocated groundwater from the Hāwea Flat zone to demonstrate that they are hydraulically connected to recharge

from the Hāwea Flat zone and Lake Hāwea (likely through groundwater monitoring and aquifer testing). Furthermore, as groundwater from the Grandview zone eventually recharges the Hāwea Flat zone, any water allocated from the Grandview zone should be subtracted from the Hāwea Flat zone allocation limit.

b) Terrace - Hillside zone

The Terrace Aquifer is distinct for several reasons: The northern edge of the aquifer is defined by glacial till that is interpreted to have low permeability; The Terrace has a distinctly higher elevation, approximately 60m, than Hāwea Flat; The elevation of basement is similar to Hāwea Flat Aquifer, hence, depths to basement are up to 115 m Below Ground Level (BGL); The depth to water is often as deep as 95 m (BGL); and the Terrace aquifer only has a few bores and only three groundwater takes that are not river-adjacent. The large river-adjacent takes mean that in practice there is very little abstraction from the Terrace Aquifer zone.

The Terrace Aquifer can be divided to two zones, each having different recharge sources. The western parts of the Terrace Aquifer (i.e. Riverside zone) are primarily recharged by Hāwea River losses originating from the riverbed downstream of Camphill Road, while the eastern flank of the aquifer (i.e. Hillside zone) is primarily replenished by hillside creek losses and LSR, substantially augmented by recent pasture irrigation. LAL (2023) defined a Terrace – Riverside zone and the remainder was delineated as a hillside zone (similar to Wilson, 2012). In addition to these zones, the model defined exclusion zones around the Regionally Significant Butterfield and Campbell Wetlands, located in the Terrace Aquifer zone (LAL, 2023).

Due to the large river-adjacent takes and the comparatively large depth to groundwater, groundwater use in the Terrace Hillside zone is light. It is also important to note that the adequate penetration depth under the long_current pumping scenario is shallower than the long_natural scenario (i.e. no irrigation). This is due to high use of river-depleting water that is transferred from outside the Hillside zone and used there instead of groundwater takes from within the zone. This water from outside the Hillside zone recharges and increases groundwater levels in the zone - if an equivalent amount of water was abstracted from interior of the Terrace Aquifer it would lead to lower levels. This indicates that in the absence of irrigation groundwater levels will be lower than their current levels, as illustrated by the penetration depths.

The modelling suggested that even a relatively small increase in the current abstraction (long_current scenario) will reduce reliability in bores. The MAPC scenario suggests that under the long_current scenario groundwater levels in several indicator wells will be below the adequate penetration depth for extended portion of the time e.g., the s_terrace well (60%), mid_terrace (15%), and ne_terrace (100%) wells. This suggests that the current allocation should be kept if the shallower long_current depth is used for assessing reliability. In contrast to that, if groundwater reliability is assessed against the long_natural depth, an additional 2,019m³/day may be available before reliability is reduced. This addition will give an annual allocation limit of 454,275m³/year, which is similar to the existing allocation of 410,000m³/year (LAL, 2023).

It is recommended to take a conservative approach by maintaining the current allocation (410,000m³/year) and using the long_current penetration depth for assessing reliability. In addition to the lower allocation limit, this approach is more conservative because the long_natural depth represents an unrealistic scenario (i.e. no irrigation). Furthermore, the Terrace Hillside is already over-allocated by around 945,000m³/year, hence, increasing the allocation will be challenging.

c) Terrace – River zone

This zone has a small number of consented takes, with a large one situated on the sub-terrace on the southwestern portion of the zone. Increasing the abstraction to the MAPC scenario has minimal impact on groundwater levels in the zone apart from near the sub-terrace monitoring point, where the effects are likely local. However, the results suggest some impacts (e.g. the sub_terrace indicator well) where the long_current depth is shallower than the long_nat depth (similar to the Terrace Hillside zone). The scenarios suggest that 100% increase in pumping will not significantly reduce reliability relative to the deepest adequate penetration depth (which is the long_current for some indicator wells and long_nat for others). However, the division between the two Terrace zones is not a groundwater flow boundary, hence abstraction in one zone can impact levels in the other, especially near the boundary. The division aims to ensure that takes are appropriately distributed across the Terrace and avoid local over-allocation near the base of the Grandview Range. Therefore, any changes will need to consider the impact on both zones (LAL, 2023). Modelling suggests that pumping the full allocation in the Hillside zone alongside increased allocation in the Riverside zone can substantially lower groundwater levels in the centre of the Terrace, with levels even falling below the (deeper) long_natural adequate penetration depth.

One option is to maintain the current allocation, where usage is substantially below the maximum allocation limit (Table 1) and there is currently around 84,000m³/year remaining to allocate. The model suggests that some increase is possible, but, if selected, it is suggested an increase of no more than 25% to the annual allocation volume, to an allocation of 1,710,500 m³/year and a maximum daily take of 12,700m³/day (a modest 10% increase from the current daily volume) [LAL, 2023].

d) Sandy Point Zone

The current groundwater use in the zone is minor (apart from river-depleting groundwater takes), currently at 56m³/day and 13,233m³/year, which is much lower than the annual allocation of 860,000m³/year (Table 1). This allocation was based on Land Surface Recharge (LSR) estimation by Wilson (2012). The current study suggests that 50% of the mean LSR (using the current RPW approach) is 660,570m³/year, hence, a mean LSR of 1,321,140m³/year. It is recommended to allocate 35% of LSR, equivalent to 462,399m³/year, consistent with the pLWRP. However, the zone is currently over-allocated by around 460,000m³/year (Table 1), which will need to be addressed. In addition to that, there is currently very little monitoring data from this zone. Hence, further monitoring will be needed before any increases in future allocation.

e) Maungawera Flat & Te Awa zone

The Maungawera Flat and Te Awa zones are located on the western side of the Hāwea River yet they form part of the basin's groundwater system, alongside the Maungawera Valley and Camphill Moraine zones. These zones fringe the Hāwea River and are also currently served by the westside branch of the Hāwea Irrigation Scheme, sourced from Lake Hāwea at the Hāwea Dam. These zones currently have no consented groundwater takes and there is minimal groundwater information about them (Table 1). The results show that both zones can have significantly higher use before impacting reliability, suggesting that a high proportion of the additional water is sourced from depleting the Hāwea River. It is therefore important to determine what is the acceptable river depletion. A proposed conservative approach is to maintain the existing allocation limits of 297,000m³ for the Te Awa and 570,000m³ for the Maungawera Flat zones. As there is very little groundwater data and information from these zones, further monitoring will be required before any increases in future allocation.

f) Camphill Moraine

The Camphill Moraine is underlain by fine-grained glacial till deposits, considered to be largely non-productive. Although small capacity domestic or stock water bores may be feasible in this area, it is

unlikely that consented groundwater takes for irrigation or industrial purposes will be viable due to its heterogeneity, low permeability, and low storage. Therefore, no allocation from the moraine was modelled. A proposed conservative approach is to not allocate any groundwater from the zone whilst retaining any PA takes (LAL, 2023).

g) Maungawera Valley

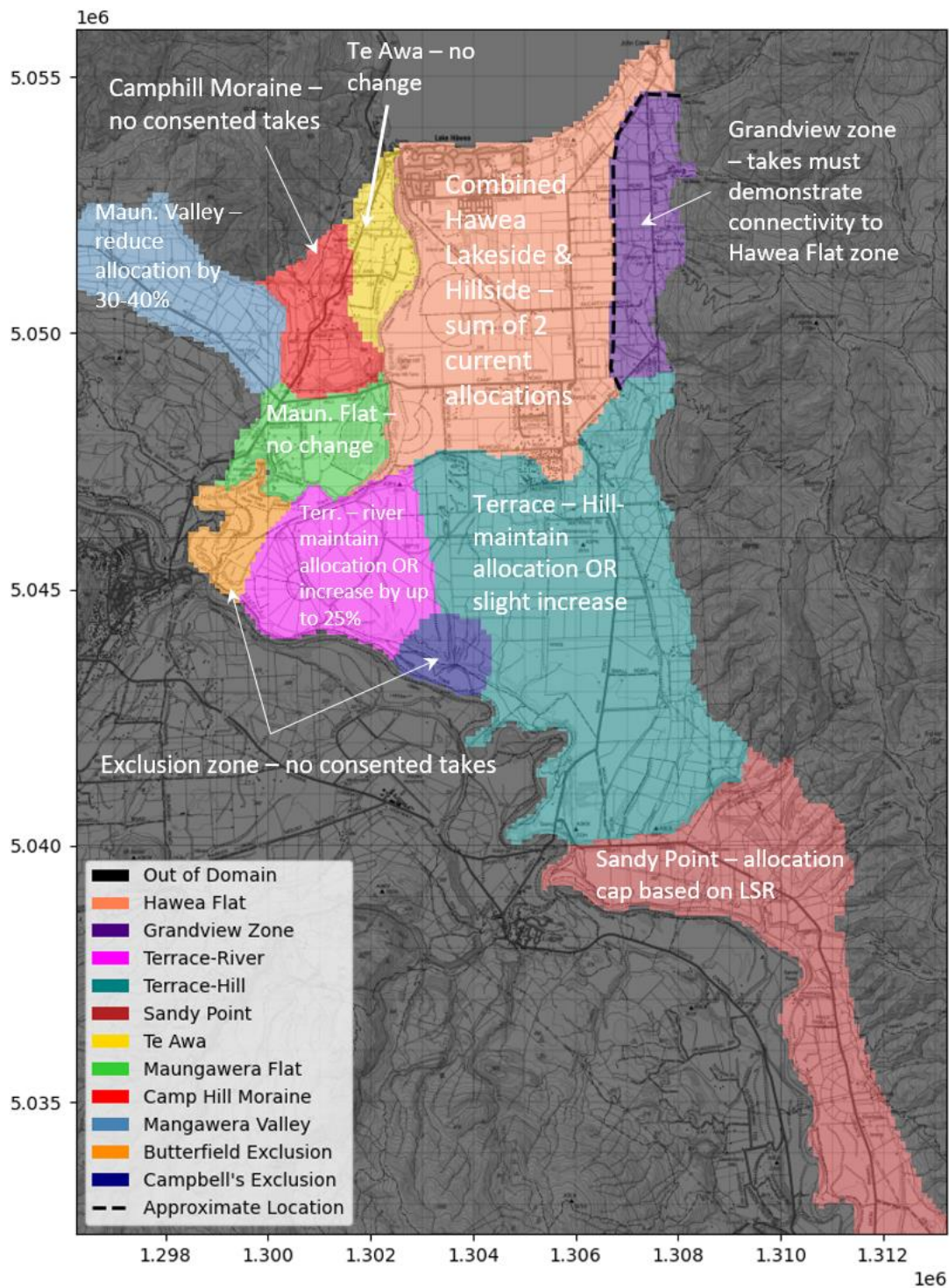
Groundwater recharge sources in the Maungawera Valley include LSR and hillside creek inflows. The transition from the Maungawera Valley and Maungawera Flat zones to the main basin is found at a distinct narrowing by the combined pinching of the Camphill Moraine and the basement schist near State Highway 6 (LAL, 2023). The Maungawera Valley is considered over allocated, with a limit of around 1.2 million m³/year, and accordingly the report suggested a lower allocation. Nevertheless, the current usage is much lower than the allocation (Table 1). This current usage is consistent with maintaining bore reliability. However, increasing the abstraction to the MAPC will substantially reduce reliability, with water levels below the adequate penetration depth between 30-45% of the time. Due to that, scenarios of reducing allocation were modelled. The results show that a 30% reduction of the allocation (i.e. allocation of 847,000m³/year) will result in groundwater levels below the adequate penetration depth for around 5% of the time while a 40% reduction (726,000m³/year) will substantially reduce the time when water levels are below the depth. These reduced allocation volumes are substantially higher than the current water use, hence there is likely capacity for these reductions. It is therefore proposed to reduce the allocation by at least 30%. Similar to other areas, there is also paucity of information regarding groundwater levels in the Maungawera Valley, hence further monitoring will be needed if groundwater use increases in this zone.

h) Summary of modelling results & proposed allocation

- Several zones are over allocated – this means that if users took their full consented amount of groundwater, levels would lower to an unacceptable level impacting on bore reliability. However, the estimated actual use is only between 25-40% of the consented or ‘paper’ allocation (Table 1).
- It is recommended to combine the current Hāwea Flat Lakeside & Hillside zones into a single Hāwea Flat zone. The eastern part of the basin should be delineated as a separate zone (Grandview).
- Under the current allocation & usage scenario (long_current) groundwater levels in Hāwea Flat, Terrace Hill & River, Maungawera Flat & Valley, and Te Awa zones are likely to be consistent with maintaining bore reliability, i.e. above the adequate penetration depth. The only exception is one indicator well in the Terrace Hill zone (s_terrace).
- Under the maximum allocation (MAPC) scenario groundwater levels in indicator wells in Hāwea Flat (3%), Terrace-Hill (5-8%), Terrace River (45%) and Maungawera Valley (30-45%) will be below the adequate penetration depth for the respective portion of the time, hence reduced reliability for accessing groundwater, where bores may go dry
- Modelling suggests that higher allocation will lower reliability and increase the frequency of bores drying in most zones. Under increased allocation groundwater levels in indicator wells are projected to fall below the adequate penetration depth for higher proportion of the time, notably in the Hāwea Flat (12-26%), Terrace Hill (11-60%), and Terrace River (15-20%) zones
- The modelling suggests that the current usage in the Maungawera Valley zone is consistent with maintaining groundwater levels. However, increasing the actual abstraction to the maximum allocation will substantially reduce reliability. It is therefore suggested to reduce allocation by at least 30%.

- The main effects from the model and recommended changes are noted below. These are shown illustrated in Table 2 and Figure 4:
 - Reduce the allocation in the Maungawera Valley and Sandy Point zones.
 - Keep the same allocation for the Hāwea Flat, Te Awa, Maungawera Flat, and both Terrace zones
 - The model added the Maungawera Valley, Grandview, & Camphill Moraine zones and the wetlands exclusion zones (section 3.4).

Figure 4: Zone-specific recommendations for the Hāwea basin



Aquifer	current allocation (m³/a)	current consented (m³/yr)	Difference (m³/yr)	Estimated aver. use (m³/yr) & % of current allocation	proposed allocation (m³/yr)	comments	Science recommendation?
Hāwea Flat Lakeside	4,600,000	2,337,015	2,262,985			- The model suggests that under the current allocation groundwater levels are not expected to fall below the adequate penetration depth. Conversely, the MAPC scenario suggests that bores in Hāwea Flat will be below the adequate depth around 5% of the time. - Increasing the allocation above the current volumes will increase the duration when bores are below the adequate depth by up to around 50% of the time.	
Hāwea Flat Hillside	4,080,000	4,585,896	-505,896				
Hāwea Flat (new zone)		6,922,911	1,757,089	2,499,733 (36% of allocated)	8,680,000		Maintain current annual allocation by combining the volumes of the two current zones.
Grandview Zone			Due to the high uncertainty about the zone's boundary & hydrogeology there are three potential options: a) No groundwater allocated apart from PA takes. b) Allocating up to 50% of the zone's LSR of 787,000m³/year. Due to the uncertainties, it is worth considering a more conservative approach (i.e. less than 35% LSR) c) Takes from the zone that wish to be included in the Hāwea Flat allocation will need to demonstrate they are hydraulically-connected to recharge from the Hāwea Flat zone & Lake Hāwea. Any water allocated in the Grandview zone will then needed to be deducted from the Hāwea Flat allocation limit.				Option C, although the exact details will still need finalising
Terrace – Hillside	410,000	1,355,263	-945,263	23,500 (6%)	a. 410,000 (current) OR b. 454,275 (equiv. to +2,019m³/day)	- Despite light groundwater use, the model suggests that even a small increase in current pumping will reduce reliability, with levels falling below the long_current depth for around 5% of the time - If the long_natural depth is used as a reliability indicator (rather than the shallower long_current), the model suggests that the allocation can slightly rise by a maximum of 2,019m³/day (i.e. allocation of 454,275m³/yr), before impacting reliability	Maintain current annual allocation volumes
Terrace – Riverside	1,560,000	1,475,111	84,889	322,376 (21%)	a. 1,560,000 (current) b. OR 1,710,500 (up to 25% increase)	- Increasing the allocation to the MAPC or above it will have minimal impacts on groundwater levels in this zone, apart from near the sub-terrace indicator well. However, as the division between the two Terrace zones is not a groundwater flow boundary, takes in one zone can impact the other. - Full allocation of the Hillside zone & increased allocation in the Riverside can lower groundwater levels in the centre of the Terrace, even below the long_nat depth - If an increased allocation is considered, a conservative increase of <25% (1,710,500m³/year) is suggested.	Maintain current allocation volumes
Sandy Point	860,000	1,321,560	-461,560	7,563 (0.88%)	462,399m³/year (35% of LSR)	The modelling suggests capping the allocation based on a portion of the LSR for the zone (total of 1,321,140m³/year).	Reduce annual allocation to 35% LSR (462,399m³/year)
Te Awa Aquifer	297,000			0	297,000 (current)	- The model suggests that the allocation for the zone can be increased, but may deplete the Hāwea river. - Conservative approach is to maintain the current allocation	Maintain current annual allocation volumes
Maungawera Flat	570,000	183,204	386,796	0	570,000 (current)	- The model suggests that the allocation for the zone can be increased, but may deplete the Hāwea river. - Conservative approach is to maintain the current allocation	Maintain current annual allocation volumes
Maungawera Valley	1,210,000	1,228,355	-22,747	162,066 (13%)	a. 847,000 (-30%) OR b. 726,000 (-40%)	- Current abstraction is consistent with maintaining reliability for bore users - Increasing takes to the MAPC will substantially reduce reliability. The modelling suggests reducing the allocation by 30-40% in order to maintain reliability	Reduce annual allocation by 40% (to 726,000m³)

Table 2: summary of zone-specific modelling results and recommendations. Zones where the difference is denoted in green currently have available water. Over-allocated zones are shown in red. The average use is based on the existing times 135 days (obtained from the LAL [2023] pump curve). The recommendations are coloured coded by keeping current annual volumes (blue), reduce annual volumes (pink), and zone-specific recommendations (yellow).

3.2 Groundwater abstraction near wetlands

The Hāwea basin contains the Campbell and Butterfield significant wetlands. The impact of groundwater pumping on the wetlands was modelled and an exclusion zone for each wetland, where no groundwater abstraction is to take place, was mapped (Figure 1). It is suggested to prohibit/restrict any groundwater takes apart from PA. The latter can be located as far away from the wetlands as possible through ORC's discretion over bore locations.

3.3 Clearer classification of groundwater/surface water take

The distinction between river proximal galleries (i.e. stream-depleting groundwater takes) and true groundwater abstraction should be better constrained. The model suggests that transferring all the river proximal (i.e. stream-depleting) takes in the Hāwea domain into the centre of the aquifer is likely to significantly lower groundwater levels (LAL, 2023). It is planned to address this matter by the proposed changes to stream depletion management in the pLWRP.

3.4 Management of Lake Hāwea Levels to protect the aquifer

The report identified strong connection between groundwater in Lake Hāwea, where the lake provides substantial recharge and affects groundwater levels in the aquifer. It also identified the likely existence of a band of low conductivity sediments that cause a sharp gradient between the lake and groundwater levels (analogous to an underground waterfall). The precise nature and elevation of this band is unknown, but the report estimates it to be between 327 – 337mASL, which is below the current lower range of operation. A fall in lake levels below this elevation will therefore cause a sharp decline in groundwater levels in the basin (substantially affecting reliability), particularly if lake levels remain below this level for an extended time period (LAL, 2023). Although this does not affect the current planning and management provisions, this impact should be noted and assessed as part of any future considerations for lake management when the Hāwea hydroelectric power generation consent is reviewed or due for renewal.

4. Other matters for consideration

Despite its limitations, this study substantially improves groundwater knowledge in the Hāwea basin and the impact of different pumping scenarios. However, there are several matters that are not directly science-related, where the decision is likely to need input from Policy and the community:

- The report suggested that it may be possible to increase the allocation in some zones, including ones that are currently overallocated. What is the community's view?
- Managing over-allocation and actual usage substantially below the allocation limits
- The modelled impacts on groundwater levels assume that bores are adequately penetrating. However, many domestic bores are likely to not be adequately penetrating, hence their water levels are likely to be affected by the current and potentially increased allocation. These lower levels may be further exacerbated by future climate change, lower rainfall, and lower lake levels. What is the acceptable portion of time when bores can have low water levels?
- The model suggests that groundwater abstraction in some zones is connected to and is depleting the Hāwea River. What is the acceptable level of river depletion?
- The model did not consider the impacts of current and future abstraction on groundwater quality. As further increase in allocation will lead to irrigation and landuse intensification, which may adversely impact groundwater quality. What are the community views regarding that?

- It is proposed to install new groundwater SoE monitoring bores in the Maungawera Valley and Sandy Point zones, where there is currently very little information. This data will increase the understanding of groundwater flow in these zones and help to improve their management.

5. References

Kitteridge, M. 2022. *Hāwea Water Usage Processing*. Hāwea Groundwater modelling project, Report 1052-08-01 R1.

Lincoln Agritech Limited (2022). *Hāwea Basin Current State Review*. Report 1052-08-01R1.

Lincoln Agritech Limited (2023). *Hāwea Basin groundwater model & allocation review*. Prepared by Matt Dumont, Jens Rekker, and Zeb Etheridge. 161 pages.

Wilson, S (2012). *Hāwea Basin Groundwater Review*. Prepared by Resource Science Unit of Otago Regional Council, June 2012, Dunedin. 69 pages.



22 AUG 2025

Hon Chris Bishop
Minister for Infrastructure
Parliament Buildings
Wellington

Four Fast-track Approvals Act referral applications – Received 25-31 July and 6 August

Dear Chris

Thank you for the opportunity to comment on four applications for referral under the Fast-track Approvals Act (the Act):

- Clutha Hydro-Scheme, FTAA-2506-1080
- Out of Scope
- [REDACTED]
- [REDACTED]

I am providing comments in my capacity as Minister for Economic Growth, focusing on whether these applications are likely to have significant economic benefits under section 22(2)(a)(iv) of the Act, based on the information provided. I defer to you and other relevant Ministers to assess the remaining criteria.

Clutha Hydro-Scheme, FTAA-2506-1080

Contact Energy Limited is requesting to lower the allowable operating range of Lake Hāwea in Queenstown Lakes. They are requesting for an additional two metres of hydro storage during normal operations and to increase contingent hydro storage by up to six metres for emergency electricity events. No construction work is proposed.

Contact Energy Limited estimated that adjusting the operating level of Lake Hāwea by two metres could provide 70 gigawatt per hour (GWh) of energy, equivalent to the annual electricity consumption of 10,000 households. Furthermore, they have estimated that the increase in contingent storage could provide an additional 200 GWh of energy, equivalent to 28,500 households in one year.

While there is no economic assessment that quantified the proposal's benefits, there will be no short-term construction related activity from this proposal. The potential economic impact could be through the increased supply in electricity. Firms could have reduced operational costs if the increased electricity generation leads to lower electricity prices. Increased supply may also address volatility in electricity prices and potentially dampen price spikes in wholesale electricity markets. However, lowering lake levels for normal operations and contingent water storage could have wider implications on the security of energy supply at a national level. We suggest that further advice be sought from the Minister for Energy.

Contact Energy Limited indicated that the increased availability in hydroelectric power could support climate change mitigation by reducing the use of coal-fired generation, thereby avoiding greenhouse gas emissions of around 69,000 to 196,000 tonnes of carbon dioxide per annum. Hence, this application may also be assessed in terms of supporting climate

change mitigation and reduction or removal of greenhouse gas emissions under section 22(2)(a)(vii) of the Act.

Out of Scope



Out of Scope



Out of Scope

Sincerely

A handwritten signature in blue ink, appearing to read 'Nicola Willis', with a large, stylized loop at the end.

Hon Nicola Willis

Minister for Economic Growth

From: s 9(2)(a)
To: [FTAreferrals](#)
Subject: FW: Minister Watts Fast Track comments
Date: Thursday, 21 August 2025 4:42:30 pm

Please see email below from Minister Watts

From: Peter Southey-Jensen s 9(2)(a)
Sent: Thursday, 21 August 2025 4:17 PM
To: Rob Schick s 9(2)(a)
Subject: Minister Watts Fast Track comments

Hi Rob,

Minister Watts has approved the following comment on the Clutha Hydro Scheme fast track consent application:

“The Clutha Hydro Scheme contributes to 10% of New Zealand’s energy generation, making up 12% of renewable generation. It has a capacity of 792MW across both the Clyde and Roxburgh Dams. Contact Energy is currently consented to operate and dam Lake Hawea at a normal operating range between 338 – 346 metres above sea level (masl) and for contingent storage at a range between 336 – 338 masl. The project seeks new consents to enable the normal minimum operating level of the lake to be lowered to 336 masl, and for contingent storage to 333 masl during a 4% Electricity Risk Curve alert (ERC) and to 330 masl during an 8% ERC.

I consider this project relates to the continued functioning of regionally or nationally significant infrastructure, as per s22(2)(a)(ii) of the FTAA, in the form of large-scale energy storage and generation, and note management of hydro storage at Lake Hawea has wider implications for energy security of supply at a national level.”

Thanks

Peter Southey-Jensen
Private Secretary (Auckland and Energy)

Office of Hon Simeon Brown
Minister of Health | Minister for State Owned Enterprises | Minister for Auckland

Office of Hon Simon Watts
Minister of Climate Change | Minister for Energy | Minister for Local Government | Minister of Revenue

M: s 9(2)(a)
Email: s 9(2)(a) Website: www.Beehive.govt.nz
Private Bag 16041, Parliament Buildings, Wellington 6160, New Zealand

Hon Penny Simmonds

Minister for the Environment
Minister for Vocational Education
Associate Minister for Social Development and Employment



21 August 2025

PS-COR1470

Hon. Chris Bishop
Minister for Infrastructure
c.bishop@parliament.govt.nz

Dear Chris,

Thank you for the invitation to provide comments on the application for referral of the Clutha Hydro Scheme project to an expert panel (the Panel) under section 17 of the Fast-track Approvals Act 2024 (FTAA).

Having reviewed the referral application, I have some comments about the level of information provided to determine the significance of potential adverse environmental effects of the project.

The applicant will be required to provide more detailed assessments at the substantive stage. However, it would be more efficient to identify as soon as possible if there are likely to be significant adverse effects from the project. This would enable appropriate strategies to avoid, remedy or mitigate them to be considered prior to lodging the substantive application.

You may wish to use your discretion to specify information that is required to be provided with the substantive application under section 27(3)(b)(ii) of the FTAA, including:

- c. an assessment of the potential impacts when operating at lower lake levels of other users in the catchment
- d. an assessment of effects on the Hunter River

There is community interest in this proposal, and recognising this, you may like to consider requiring the Panel under section 27(3)(b)(iii) of the FTAA to invite the Guardians of Lake Hāwea, a community group that has submitted previously on these matters, to enable them to comment on the substantive application.

This approach will reduce the risk of unanticipated significant matters being identified late in the process and will support the smooth and efficient conduct of the Panel's deliberations and the process for the applicants.

Thank you again for the opportunity to provide comments on this referral application.

Your sincerely,

A handwritten signature in black ink, appearing to read 'Penny Simmonds'.

Hon Penny Simmonds
Minister for the Environment



12 August 2025

Hon Chris Bishop
Minister for Infrastructure
Parliament Buildings
Wellington

Fast-track Approvals Act referral application – Clutha Hydro Scheme – Increasing Flexibility and Security of Electricity Supply (FTAA-2506-1080)

Dear Chris

Thank you for the opportunity to comment on the Clutha Hydro Scheme – Increasing Flexibility and Security of Electricity Supply application for referral under the Fast-track Approvals Act.

This letter provides comments in my capacity as Minister for Regional Development. Based on Section 22 of the FTAA 2024, I have considered the project in terms of whether it:

- a) will deliver new regionally or nationally significant infrastructure or enable the continued functioning of existing regionally or nationally significant infrastructure
- b) will deliver significant economic benefits.

Contact Energy has applied for Fast-track approval to lower the minimum operating level of the Lake Hāwea Dam, which provides all water storage for the Clutha Hydro Scheme.

This application has limited direct implications for the Regional Development portfolio. The potential energy affordability benefits of increased national electricity supply could benefit regional communities and businesses; however this has not been quantified in the referral application.

The application appears to have potentially significant implications for New Zealand's energy system, and any comments from the Minister for Energy are likely to provide more relevant advice on the project's significance and benefits.

Yours sincerely

A handwritten signature in blue ink, appearing to be 'Shane Jones'.

Hon Shane Jones
Minister for Regional Development

Your written comments on a project under the Fast Track Approvals Act 2024

21 August 2025

Project name	Clutha Hydro Scheme – Increasing Flexibility and Security of Electricity Supply (Project) Requests REQ001733M8G7 and REQ001718T2K5
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Before the due date, for assistance on how to respond or about this template or with using the portal, please email contact@fasttrack.govt.nz or phone 0800 FASTRK (0800 327 875).

All sections of this form with an asterisk (*) must be completed.

1. Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
Organisation name (if relevant)	Transpower New Zealand Limited		
*First name	Jo		
*Last name	Mooar		
Postal address	P O Box 1021 Wellington 6011		
*Contact phone number	s 9(2)(a)	Alternative	
*Email	s 9(2)(a)		

2. Please provide your comments on this application
Transpower has been identified as an “other person” for the purpose of section 17(5) of the Fast-track Approvals Act 2024 (Act). Thank you for the opportunity to provide comments about the Project. Transpower supports the processing of the applications for the Project via the Act. The Clutha Hydro Scheme relates to renewable electricity generation and supports climate change mitigation (section (22)(2)(a)(vii) of the Act. The Project also relates to the continued functioning of regionally and nationally significant infrastructure (section 22(2)(a)(ii) of the Act. Two referral applications have been made in relation to:

- new resource consents to enable:
 - the minimum operating level of Lake Hawea to be lowered to 336 masl
 - the minimum level of Lake Hāwea to be lowered to 333 masl at times of Security of Supply Alerts, and to 4% Electricity Risk Curve (“ERC”) (**Alert Level**) and 330 masl at 8% ERC during low storage contingency events, as defined by the system operator (being Transpower), to be used solely during emergency or crisis situations regarding electricity supply; and
- consequential amendments to condition 9 of consent no. 2001.383 in relation to Lake levels.

Transpower supports the fast-tracking of the application to increase the normal operational range, and access additional contingent storage for electricity generation during times of emergency.

The issues in relation to accessing contingent storage are complex. Contingent storage acts as the fuel of last resort in the system. The application proposes retaining the ability to access contingent storage when at Alert Level (albeit at lower levels than currently), and the ability to access further water during times of emergency.

We note we would be concerned if the water available for contingent storage reduced as a result of the processing of the application. Any reduction in contingent storage could impact on security of supply. Contact proposes using the 8% ERC, but this can be low at certain times of the year and might not meet the intended purpose proposed by Contact. We suggest the trigger for 8% ERC might need to be adjusted to account for contingent storage and any buffer.

Transpower is happy to provide further, more detailed, comments about these complex matters through the substantive process. We are also happy to engage on any adjustment to the 8% ERC proposed by Contact.

Note: All comments will be made available to the public and the applicant when the Ministry for the Environment proactively releases advice provided to the Minister for the Environment.

24 September 2025

Helen Willis
Application Lead
Ministry for the Environment

referral@fasttrack.govt.nz

Dear Helen

FTAA-2506-1080 - Contact Energy Ltd - Application to lower the level of Lake Hawea

In accordance with section 20 of the Act, you requested the following in relation to the application by Contact Energy Ltd to lower the level of Lake Hawea:

1. The application proposes new consents to enable the minimum level of Lake Hāwea to be lowered to 333 masl at 4% ERC and 330 masl at 8% ERC during low storage contingency events, to be used solely during emergency or crisis situations regarding electricity supply. Please confirm if accessing this additional contingent storage could occur under the current consent conditions (including powers available under section 330 of the Resource Management Act 1991).

Response:

Current Conditions

Condition 9 of Resource Consent 2001.383 to dam Lake Hawea specifies the minimum lake levels. Condition 9(b) specifies the minimum operating level under normal operating conditions as 338 m (3-hour rolling average). The lake level can be lowered below that level as required to ensure dam safety or when the Electricity Commission determines that reserve generation capacity should generate electricity.

However, Condition 9(d) specifies that the lake level may not be lowered below 336 m (3-hour rolling average). Therefore, there is no provision for the lake level to be dropped below 336 m under the existing consent, except that the 3-hour rolling average would provide for some minor fluctuation around the 336 m average.

Condition 9 of Resource Consent 2001.383 to dam Lake Hawea:

- e) *The normal maximum operating level for Lake Hawea shall not exceed 346 m above datum (based on a 3-hour rolling average), as measured at the Hawea Dam site (Site No. 75288), except when a higher lake level is required either by the Clutha Flood Rules Version 1 (if still operative) or in order to implement the Flood Management Plan.*
- e) *The normal minimum operating level for Lake Hawea shall not decrease below 338 m above datum (based on a 3 hour rolling average), as measured at the Hawea Dam site (Site No. 752 88), at any time except as required to ensure dam safety or when the Electricity Commission (or any statutory body exercising like powers and functions to the*

Electricity Commission) determines that reserve generation capacity (such as that currently located at Whirinaki) should generate electricity.

- e) The Lake shall be returned to its minimum operating level of 338 m above datum as soon as possible after the dam safety issue is resolved or when the the Electricity Commission (or any statutory body exercising like powers and functions to the Electricity Commission) determines that operation of reserve generation capacity (such as that currently located at Whirinaki) is no longer required.*
- e) The lake level shall not decrease below 336 m above datum (based on a 3-hour rolling average), as measured at the Hawea Dam site (Site No. 75288), at any time.*
- e) Under flood flow conditions, the level of the lake shall be managed in accordance with the Clutha Flood Rules Version 1(if still operative) or the Flood Management Plan.*

Section 330 of the Resource Management Act

In general terms, the emergency powers under section 330 of the RMA do appear to be available to Contact as they meet the definition of a lifeline utility operator (and may be a requiring authority). To use the emergency powers under this section, Contact would need to be satisfied that one of the situations in sections 330(1)(d) to (f) applies:

- f) an adverse effect on the environment which requires immediate preventive measures; or*
- f) an adverse effect on the environment which requires immediate remedial measures; or*
- f) any sudden event causing or likely to cause loss of life, injury, or serious damage to property—*

Section 330 powers are only available when there is an adverse effect on the environment, which causes an adverse effect on the project/work/service/system. In our view, it is unlikely that low lake levels (leading to reduced generation capacity) would amount to an adverse effect on the environment other than in very rare cases. Case law has emphasised the need for immediacy in a response, to be able to use these powers. In our opinion, whether there is an element of immediacy in undertaking preventative or remedial measures would depend on the following factors:

- The level of actual or likely adverse effect on the electricity operation, and the seriousness of effects this may cause (i.e. will electricity supply be impacted to the extent that homes and services are left without electricity, which could put life and property at risk).
- The length of time for which the actual or likely adverse effect on the electricity operation is expected to continue.
- Whether there are other sources of electricity supply that can be relied on to prevent/remedy the effect (because if the particular actions are not required to remedy the effect, they do not fall within the scope of section 330).

Ultimately, whether emergency powers are available in the situation where there is an “emergency or crisis situation” involving electricity supply will depend on the specific factors of each case and the factors above. We expect that it would only be in very rare scenarios that the powers would be available for this purpose (for example, where some event has occurred that prevents other sources of electricity being available and life and property are at risk).

Additional Matter

Although not related to the s20 request for information, we also wish to bring to your attention that there are 50 Water Permits to take ground water or surface water in this area include a condition that prevents the taking of water when the level of Lake Hawea drops below 338.2 m (3-hour rolling average). A representative example of such a condition is as follows:

- b) During the period 1 May to 31 August in any calendar year the taking of water for the purpose of irrigation authorised by this consent shall cease.*
- b) At all other times the taking of water for the purpose of irrigation authorised by this consent shall cease when:*
 - i. the combined flow levels in the following rivers are below 250 cubic metres per second: - Clutha River at Cardrona (NIWA Hydrological Recording Site No. 75282) plus ten cubic metres per second, less the mean Hawea River flow as measured at the Camp Hill site (NIWA Hydrological Recording Site No. 75287); - Kawarau River at Chards Road (NIWA Hydrological Recording Site No. 75262); - Nevis River at Wentworth (NIWA Hydrological Recording Site No. 75265); and - Manuherikia River at Ophir (NIWA Hydrological Recording Site No. 75253); and*
 - ii. The level of Lake Hawea is at or below 338.2 metres above datum (based on a 3 hour rolling average) as measured at Hawea Dam site (NIWA Hydrological Recording Site No. 75288).*

Contact's existing consent provides for the lowering of the lake during normal operating conditions to 338 m above datum (3 hour rolling average). Therefore, consent holders with the above (or similar) condition on their Water Permits are currently unable to utilise their consents when the lake level is below a level provided for by the consent (338.2 m). However, as the proposed minimum operating level and proposed contingency levels are lower than currently consented, it would be likely that the frequency and duration of events in which consent holders would be unable to utilise their Water Permits would increase.



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