

Before the Hearings Panel

Under the Resource Management Act 1991.

In the matter of Priority Area Landscape Schedules Variation to the Queenstown Lakes Proposed District Plan.

Memorandum of counsel on behalf of Jeremy Burdon, Jo Batchelor and Andrea Donaldson.

17 November 2023

Submitter's solicitors:
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May it please the Panel

- 1 This memorandum of counsel is filed on behalf of Jeremy Burdon, Jo Batchelor and Andrea Donaldson (**Submitter**) further to the Submitter's appearance at the hearing on 8 November 2023 and in response to the Panel allowing the Mr. Burdon to provide further supplementary information on the history of the raising of Lake Hāwea, through Counsel.

History of the raising of Lake Hāwea

- 2 Lake Hāwea was dammed and artificially raised in the 1950's as part of the Roxburgh hydroelectric scheme.¹ Construction began in 1954 and was completed by 1958. Government agencies were involved in the construction process, however there was limited public input and as a result, three homesteads were flooded² including the original Hunter Valley homestead.³
- 3 The lake was originally intended to be raised by 12 meters⁴ however this was increased, resulting in the lake being raised around 18-20 meters by 1958.⁵ The lakes maximum water level was reached in the 1960's as shown in Appendix 1, Figure 1, to 348 meters.⁶
- 4 After the lake was raised, there were no minimum or maximum flow requirements for the Hāwea River.⁷ This meant there was no restriction on how much water could be released each year.⁸ This changed after a period of drought in the region meant the lake returned to its original level in 1977, as shown in Appendix 1, Figure 2.⁹ Lowering the lake resulted in significant

¹ Matthew Haggart "Lake Hāwea dam" (16 June 2008) Te Ara The Encyclopedia of New Zealand <<https://teara.govt.nz/en/photograph/22475/lake-hawe-a-dam>>.

² Email from Jeremy Burdon to Maree Baker-Galloway regarding Proposed District Plan Submission – Landscape Schedules (10 November 2023).

³ Barbara Chinn "A Pretty Good Place to Live: Lake Hāwea & Hāwea Flat" (2015) <<https://qldc.govt.nz/media/l5bndghc/s3448-t16-a-pretty-good-place-to-live-hawe-a-history.pdf>> at pp. 41.

⁴ Above, n2.

⁵ Haggart, above, n1; above n2.

⁶ Electricity Commission "Lake Level History" (27 February 2009) https://emidatasets.blob.core.windows.net/publicdata/Datasets/Environment/_AdditionalInformation/ArchivedDatasets/20100630_HydrologicalData/20090331_Lake_level_history/20090331_Lake_level_history_report.pdf, pp. 30.

⁷ Otago Regional Council "Otago Regional Council Staff Recommending Report 2002/428" (6 August 2002).

⁸ Above, n2.

⁹ Chinn, above, n3.

public criticism, as surrounding properties dealt with dust storms¹⁰ and dead trees, while farmers were left without fences.¹¹

- 5 Today, Lake Hāwea is a "storage lake" due to the construction of the Clyde Hydro Dam for power generation. It provides water storage for both the Roxburgh and Clyde power stations.¹²
- 6 The Otago Regional Council (**ORC**) granted resource consent 2001.383 for Contact Energy Limited to dam Lake Hāwea at the outlet to the Hāwea River with an earth dam (Hāwea Dam) with a crest level of 351.4 metres above datum.¹³
- 7 Conditions of the consent dictate water levels of Lake Hāwea are to remain at certain levels, within a general (subject to exceptions) operating range of 8m, as stated below:
 - (a) *The normal maximum operating level for Lake Hāwea shall not exceed **346 m** above datum (based on a 3-hour rolling average), as measured at the Hāwea 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 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.*
 - (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 Electricity Commission (or any statutory body*

¹⁰ Mark James, Alan Mark and Martin Shingle "Lake Managers' Handbook: Lake-Level Management" (June 2002) Ministry for the Environment <<https://environment.govt.nz/assets/Publications/Files/lm-lake-levels-jun02.pdf>> at pp. 30.

¹¹ Email from Jeremy Burdon to Maree Baker-Galloway regarding Proposed District Plan Submission – Landscape Schedules (10 November 2023).

¹² Matthew Haggart "Lake Hāwea dam" (16 June 2008) Te Ara The Encyclopedia of New Zealand <<https://teara.govt.nz/en/photograph/22475/lake-hawe-a-dam>>.

¹³ Water Permit, Consent No: 2001.383

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 Hāwea Dam site (Site No. 75288), at any time.*

- 8 It is submitted that by being a "storage lake" and with continuously changing water levels, Lake Hāwea may be considered as part of an outstanding landscape, but no longer a natural characteristic – it is highly modified.
- 9 The raising of the lake and formation of a new road, has resulted in part of Mount Burke, which forms part of the Submitter's land, to lose some of its best farming and highly productive land.¹⁴

Dated this 17th day of November 2023.

Maree Baker-Galloway

Maree Baker-Galloway/Laura McLaughlan
Counsel for the Submitter

¹⁴ Email from Jeremy Burdon to Maree Baker-Galloway regarding Proposed District Plan Submission – Landscape Schedules (10 November 2023).

Appendix 1 – Supplementary information in respect of Lake Hāwea.

Figure 1: Lake Hāwea Level Record (m) 1930 to 2008.

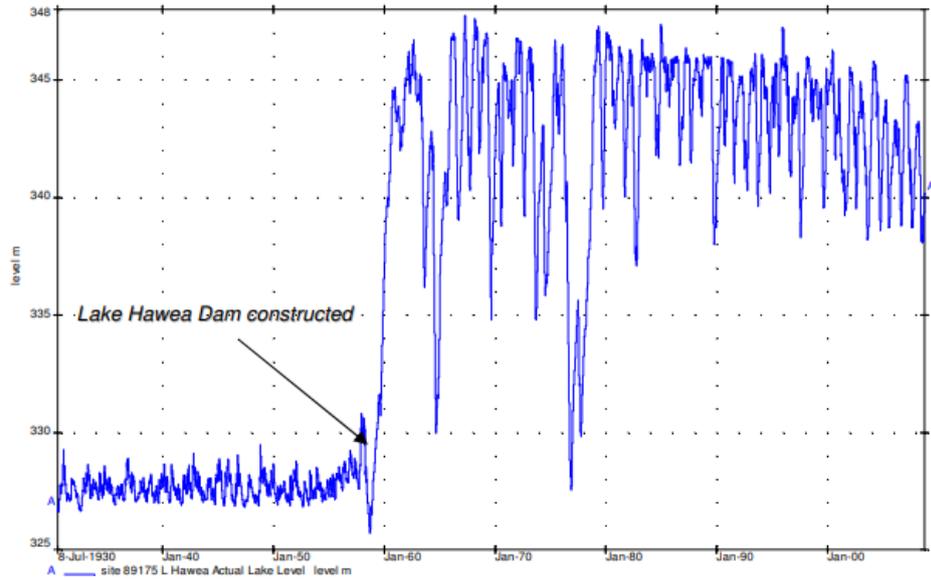


Figure 3.9 Lake Hawea Level Record (m) 1930 to 2008

Source: Electricity Commission "Lake Level History" (27 February 2009)

https://emidatasets.blob.core.windows.net/publicdata/Datasets/Environment/_Additional Information/ArchivedDatasets/20100630_HydrologicalData/20090331_Lake_level_history/20090331_Lake_level_history_report.pdf, at pp. 30.

Figure 2: Lake Hāwea Level (m) Strip 1930 to 2008.

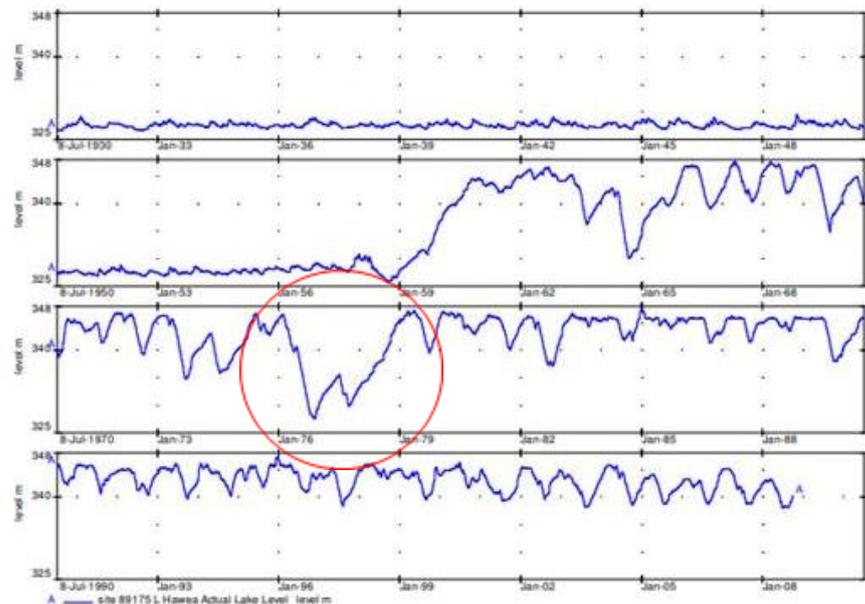


Figure 3.10 Lake Hawea Level (m) Strip 1930 to 2008

Source: Electricity Commission, "Lake Level History" (27 February 2009)
https://emidatasets.blob.core.windows.net/publicdata/Datasets/Environment/_AdditionalInformation/ArchivedDatasets/20100630_HydrologicalData/20090331_Lake_level_history/20090331_Lake_level_history_report.pdf at pp. 30.