BEFORE AN EXPERT PANEL
TEKAPO POWER SCHEME

FTAA-2503-1035

Under the	**FAST-TRACK APPROVALS ACT 2024**
In the matter of	an application for replacement resource consents in relation to the Tekapo Power Scheme
By	**GENESIS ENERGY LIMITED**
	Applicant

MEMORANDUM OF COUNSEL FOR GENESIS ENERGY LIMITED

Response to comments on the draft decision and draft conditions

23 October 2025

BUDDLE FINDLAY

Barristers and Solicitors
Wellington

Solicitor Acting: **David Allen / Chelsea Easter**

[redacted]
PO Box 2694 DX SP20201 Wellington 6011

MAY IT PLEASE THE PANEL:

1. This memorandum of counsel for Genesis Energy Limited (**Genesis**) responds to the comments on the draft decision and draft conditions. Additional detail and justification for all relevant matters, including those summarised below, is provided by Mr Matthews in **Appendix 1**.

Comments on the draft decision

2. In Minute 7 the panel sought comments on its draft decision, and the draft conditions, from the Minister for Māori Crown Relations: Te Arawhiti and Minister for Māori Development by the close of Monday 20 October 2025.

3. On 15 October the Minister for both portfolios responded stating that he supports the panel's draft decision and the conditions.

4. Genesis thanks the Minister for this response and, given the supportive position, has no further comments to make.

Comments on draft conditions

5. In Minute 7 the panel sought comments from the parties on its draft conditions by the close of Monday 20 October 2025.

6. The following parties commented:

   (a) Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki (Kā Rūnaka);

   (b) Department of Conservation (DOC);

   (c) Canterbury Regional Council (CRC); and

   (d) Royal Forest and Bird Protection Society of New Zealand Incorporated (F&B).

7. Kā Rūnaka has been in ongoing discussions with Genesis and is comfortable with the conditions as appended to this memorandum.

8. DOC seeks one minor amendment to the draft conditions to provide clarity, in Condition 31, that the person preparing the report is independent of the consent holder. Genesis agrees with the intent of this comment as addressed by Mr Matthews in **Appendix 1** and the condition wording has been amended in **Appendix 2**.

9. CRC's comments were predominantly minor (including providing condition number referencing) and cross-referencing checks, but also addressed:

   (a) Water permit, Condition 4 providing further context around the background to, and intent for, the condition. CRC noted it accepts the panel's concerns and while the condition may not be required at all proposes an advice note to be attached at the end to aid clarity for any compliance review in the future.

   While Genesis acknowledges the advice note approach proposed by CRC it does not consider that to be necessary and, for the reasons set out by Mr Matthews in **Appendix 1**, Genesis supports the retention of the condition as drafted. It provides an important linkage to the Waitaki Catchment Water Allocation Plan and its presence, with that clear linkage, is supported by Kā Rūnaka.

   (b) Water permit, Condition 14, seeking the inclusion of "or volume". As mentioned by CRC, and explained by Mr Matthews in **Appendix 1**, its inclusion is required as measuring occurs both in channels and in pipes with different sensors for each.

   (c) Schedule 1, Condition 17 related to the inclusion of a location plan to the Fish Salvage Management Plan (FSMP), or that the FSMP be issued with the consent. As explained by Mr Matthews in **Appendix 1**, Genesis' preference is to have the FSMP issued with the consent. **Appendix 3** contains the FSMP for the panel to issue with its decision.

10. Yesterday a memorandum was received from F&B stating that it "has no comment to make on the draft decision or conditions." By Minute 8 the Panel acknowledged receipt of Forest and Bird's memorandum of counsel and

records that it will not be considered further in the Panel's decision-making on the application.

11. Genesis thanks the parties who responded on the conditions and considers that the conditions as in Appendix 1 are robust and comply with all the relevant statutory provisions.

Dated this 23rd day of October 2025

David Allen / Chelsea Easter
Counsel for the Applicant

APPENDIX 1

APPENDIX 1: CONSENT CONDITIONS **CONSENT HOLDER:** Genesis Energy Limited **CONSENT TYPE:** Water Permit **CONSENT NUMBER**: CRC254907 **CONSENT DURATION** 35 years	Genesis understands that CRC has allocated record number CRC254907 to the water permit being sought by Genesis through the Fast-track Approvals Act process.
0. The activities authorised by this resource consent comprise: a. The damming of the Takapō River via the Lake Takapō Control Structure (Gate 16) to control and manage the levels of Lake Takapō; b. The taking, diverting, and using of water from Lake Takapō via the Tekapo Intake Structure for the generation of electricity, and ancillary purposes, at the Tekapo A and B Power Stations; c. The damming of the Takapō River at the Lake George Scott Weir to control and maintain the water levels in Lake George Scott; and d. The taking and diversion of water from the Takapō River via the Tekapo Canal Control Structure (Gate 17) and using this water for the generation of electricity, and ancillary purposes, at the Tekapo B Power Station. *Advice note: the activities described above do not constitute consent conditions that can be changed, cancelled or reviewed under sections 127 or 128 of the Resource Management Act 1991.*	
1. The activities authorised by this resource consent are located at:	

Legal Description

Tekapo Power Scheme – Lot 1 DP 421602, Lot 1 DP 562455, Lot 1 DP 439605, Section 2 SO 567261, Lot 2 DP 364538, Lot 1 DP 407182, Lot 2 DP 407182, Section 1 SO 331257, Section 1 SO 20293, Section 1 SO 394353, Section 2 SO 394353.

Map References

Structure	New Zealand Transverse Mercator Coordinate	
	Easting	Northing
Tekapo Control Structure (Gate 16)	1398034	5124317
Tekapo Intake Structure	1397200	5124969
Lake Tekapo Stilling Well	1397431	5124893
Tekapo A Power Station	1396441	5123467
Lake George Scott Weir	1396531	5123259
Tekapo Canal Control Structure (Gate 17)	1396526	5123315
Tekapo A Tailrace	1396436	5123403
Tekapo Canal (Upstream)	1396434	5123398
Tekapo Canal (Downstream)	1378199	5111027

Note: Where structure names described above are referred to in the consent conditions, then the specific map coordinates for those structures are those described above and are not included in the specific consent condition.

GENERAL CONDITIONS	
2. The Consent Holder must ensure that the damming, taking, diversion, and use of water authorised by this resource consent are carried out in accordance with the following conditions and with the conditions set out in Schedule One, which form a part of this resource consent. Where there is a difference or apparent conflict between interpreting the conditions of this resource consent and the conditions in Schedule One, the specific conditions in this resource consent prevail.	
DIVERSION AND WATER TAKE CONDITIONS	
3. Provided the combined rate of divert, take, and use does not exceed 130 cubic metres of water per second, the consent holder may: a. Divert, take, and use up to 130 cubic metres of water per second from Lake Takapō via the Tekapo Intake Structure for ~~hydro-electricity generation purposes~~the generation of electricity and ancillary purposes. b. Divert, take, and use up to 130 cubic metres of water per second from the Takapō River via the Tekapo Canal Control Structure (Gate 17) for the generation of electricity and ancillary purposes ~~hydro-electricity generation purposes~~.	A change to the condition wording regarding the purpose for which the water is used is proposed for consistency with the activity wording used in 0 above and in the application documents. Genesis has confirmed its understanding with CRC that the use of "ancillary purposes" in this context relates to purposes that are not directly "generation of electricity" but are directly related to that activity in such a way that electricity cannot be generated unless those uses also occur.

4. The maximum volume of water that may be taken for the Tekapo Power Scheme must not exceed that necessary to provide for the annual allocation to activities specified in the table attached as Appendix 1, which forms part of this consent.	In paragraph 420.4 of its draft decision, the Panel states that it has concerns regarding the workability and enforceability of this condition and seeks comments from the Applicant and CRC on the condition. Condition 4 and the inclusion of Appendix 1 (which replicates Table 5 in the WAP) via proposed consent condition 4 provides a direct link to the allocation requirements set out in the Waitaki Catchment Water Allocation Plan and recognises the overall requirement for "all other inflows" to be allocated to electricity generation and is relevant to the allocation of water for the Tekapo Power Scheme. Genesis considers that the condition is both workable and enforceable to the extent necessary within the scope of the conditions relevant to the water permit sought for the damming, taking, diverting, and using of water as part of the Tekapo Power Scheme. The CRC response to the draft conditions comments they do not oppose inclusion of the condition but that the condition could be "*cumbersome to enforce*". CRC suggest an advice note could be used to provide guidance

<table>
<tr><td></td><td>to anyone reading the consent document. Genesis does not consider that the advice note is necessary, but should the Panel decide that it would be helpful Genesis would not oppose the wording proposed by CRC.

Further comment on proposed condition 4 is provided in this document at the end of the draft consent condition.</td></tr>
<tr><td>5.</td><td>Except as provided for in Conditions 6 and 7 below, the consent holder may, at any time, take or divert water from Lake Takapō for the generation of electricity and ancillary purposes~~the purpose of hydro-electricity generation~~, when the ~~l~~Lake Takapō level exceeds the following minimum ~~operating~~control levels:

<table><tr><th>Period</th><th>Lake Level (metres above mean sea level)</th></tr><tr><td>April to September (inclusive)</td><td>702.1</td></tr><tr><td>October to March (inclusive)</td><td>704.1</td></tr></table>
Advice note: all lake levels specified in the conditions of this resource consent are relative to Lyttelton 1937 datum.</td><td>The conditions have been updated and standardised to use “minimum control levels” (as referred to in the existing consents) to distinguish these from the “minimum lake level” of 701.8m also provided for in the conditions.</td></tr>
<tr><td>6.</td><td>When the aggregate storage for New Zealand or the South Island is below the relevant System Operator Contingent Storage Release Boundary trigger level under the Security of Supply Forecasting and Information Policy (as approved under Part 7 of the Electricity Industry Participation Code 2010), or any subsequent equivalent regulatory arrangement</td><td>Genesis considers that the words “reduction in” and “reducing below” should be replaced with “falling below” or similar to make the trigger point for notification clearer, noting that lake</td></tr>
</table>

	that enables the consent holder to access contingent storage in specified circumstances, the consent holder may take or divert water from Lake Takapō for the generation of electricity and ancillary purposes~~hydro electricity generation purposes~~ below the Lake Takapō minimum ~~operating~~control lake levels specified in Condition 5, to a minimum lake level of 701.8 metres above mean sea level. Written notice of the reduction in lake level and its expected duration must be given to the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki: a. Prior to the ~~reduction in~~ ~~l~~Lake Takapō level falling below the minimum control lake levels specified in Condition 5; and b. Within one working day ~~of reducing below~~after the ~~l~~Lake Takapō level falls below the minimum control lake level specified in Condition 5.	levels reduce through a combination of low inflows and generation activities. The change proposed clarifies the circumstances in which the defined parties must be notified.
7.	Other than as provided for in Condition 6, if the Lake Takapō lake level is below 704.1 metres above mean sea level on 30 September, the consent holder may continue to take or divert water from Lake Takapō for the generation of electricity and ancillary purposes~~hydro-electricity generation purposes~~ on and after 1 October provided the Lake Takapō 24-hour rolling average lake level does not decrease further.	
8.	If the ~~l~~Lake Takapō level has been reduced in accordance with Condition 6 or is below 704.1 metres above mean sea level in accordance with Condition 7, the consent holder must ~~take all reasonable measures to~~ restore Lake Takapō to the consented minimum control lake level under Condition 5 as soon as practicable, after consideration of such matters including (but not limited to):	Genesis considers that the use of the term “all reasonable measures” introduces uncertainty as to what “all” measures includes. As the intent of the condition is that lake levels are restored to the consented minimum control level as soon as practicable, “all reasonable measures” can

	a. Electricity generation levels required to maintain security of electricity supply in New Zealand; b. Operational matters, such as maintaining flows, minimum water levels, and water quality through the scheme; and c. Present and predicted lake inflows.	be deleted from the condition. The term "reasonable measures" was used in the condition before the matters of consideration identified in a – c were defined, since those matters are now defined, "reasonable measures" is redundant.
9.	If the ~~l~~Lake Takapō level has been reduced in accordance with Condition 6 or is below 704.1 metres above mean sea level in accordance with Condition 7, the consent holder must: a. Advise, in writing, the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki weekly of: i. The progress towards, and the expected timetable for, restoring Lake Takapō to the consented minimum control lake level under Condition 5; ii. The strategies adopted to restore Lake Takapō to the consented minimum control lake level; and iii. The lake level at the end of each reporting week. b. No later than eight weeks following the completion of each activation of Condition 6 or 7, the consent holder must provide, in writing, the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki with the following information:	Consistent with other changes in Attachment 2 to refer to "Lake Takapō" only, reference to "Lake Tekapo" or the "Tekapo River" has been removed from the conditions. Adjustments have also been made to clarify that references to "lake" in the conditions means Lake Takapō. "Tekapo" is retained where it refers to Tekapo Power Scheme structures or activities.

i. The date and time at which Lake Takapō ~~/ Lake Tekapo~~ was lowered below the consented minimum control lake level under Condition 5; ii. The levels at which Lake Takapō ~~/ Lake Tekapo~~ was managed over the duration of the activation; iii. The duration of the activation; iv. The length of time following completion of the activation for Lake Takapō to be restored to the consented minimum control lake level under Condition 5; and v. A written description of the circumstances leading to activation.	
10. If the consent holder has managed the ~~l~~Lake Takapō level in accordance with Conditions 6 and/or 7 in the previous 12 months, the Canterbury Regional Council may review Conditions 8 and/or 9 of this resource consent by giving notice of its intention to do so in accordance with section 128 of the Resource Management Act 1991. Such notice may be given at any time within six months following the receipt of the information required in Condition 9 for the purpose of amending or adding conditions to ensure that adverse effects of the management of the lake levels under Condition 5 are appropriately managed.	
MONITORING CONDITIONS	
11. The consent holder must install and operate a monitoring device or system to ~~enable~~demonstrate compliance with the flow rate(s) specified in Condition 3 to be assessed, based on a 30-minute moving average. The monitoring device or system must: a. Measure and record flow rate at the locations and with the accuracy specified in the table below;	"Demonstrate" better reflects the requirements to be met under a – d. Genesis proposes that the word "Measured" is adjusted to "Measurement" for consistency with condition 6 in the discharge consent.

b. Be connected to a system which collects and stores the data continuously;

c. Record the flow rate at each location specified in the table below at a frequency not greater than every five minutes; and

d. Be verified using the method, accuracy, and at the frequency identified for each location listed in the table below.

Location	Compliance Determination Frequency	Measur~~ed~~ment Accuracy	Verification Method	Verification Accuracy	Verification Frequency
Tekapo A Power Station	30-minute moving average	± 5%	Winter Kennedy data set	± 5%	Annually
			Open channel	± 10%	Five yearly
Tekapo Canal Control Structure (Gate 17)	30-minute moving average	± 10%	Open channel	± 10%	Annually

Advice Note: Tekapo A Power Station is considered a pipe flow; however, the five yearly validation will be via open channel method measured to within an accuracy of ± 10% of the actual flow.

Advice Note: Gate 17 is considered an open channel measurement device due to the means of validation being an open channel method. Gate 17 operates in both a closed orifice and open channel 'free flow' manner.

Advice Note: For the avoidance of doubt, Condition 3 requires that the total flow taken between Tekapo A and Gate 17 must not be more than 130 cubic metres per second.

12. The consent holder must install and operate a monitoring device or system to measure the Lake Takapō water level at the Lake Tekapo Stilling Well. The monitoring device or system must: a. Use a sensor with a resolution of no more than ±3 millimetres accuracy; b. Be connected to a system which collects and stores the data continuously; c. Record the water level at the Lake Tekapo Stilling Well at a frequency not greater than every five minutes; and d. Be verified every three months using a physical lake level measurement at the Lake Tekapo Stilling Well.	
13. Compliance with the Lake Takapō minimum ~~operating~~control lake levels specified in Condition 5 and the maximum ~~control~~ and minimum control lake levels specified in Condition 1 of Schedule One, must be determined as a 60-minute moving average in relation to mean sea level.	
14. The consent holder must provide the flow rate or volume and water level data recorded for each day in accordance with Conditions 11 and 12 to the Chief Executive (or delegated nominee) Canterbury Regional Council electronically, in a format acceptable to the Council, no later than the end of the following working day.	The words "flow or volume and water level data" were agreed with CRC as being appropriate given their data storage and use requirements. This has been rechecked with CRC and their preference is to retain "volume" in the wording. Genesis proposes adjusting "the following day" to allow for provision of data on working days.

MISCELLANEOUS	
15. The consent holder must ensure that compliance with Conditions 1 to 14 is maintained at all times, except where an alternative operating regime is necessary in order to maintain the structural integrity and safety of any of the Tekapo Power Scheme or Waitaki Power Scheme infrastructure, or public safety.	
16. Where an alternative operating regime is necessary, as provided for in Condition 15, the consent holder must take all reasonably practicable steps to comply with Conditions 3 to 12 and the conditions in Schedule One and to safely return the Tekapo Power Scheme to normal operation.	
17. Where control of the Tekapo Power Scheme cannot be returned to normal operation within two hours, the consent holder must: a. Notify the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki as soon as practicable; and b. Within two working days of the circumstances identified in this condition occurring at the Tekapo Power Scheme, provide a timetable for returning to normal operation as soon as practicable if that has not already occurred within two working days.	

Genesis comments on and proposed changes to draft Panel conditions of consent

CONSENT HOLDER: Genesis Energy Limited **CONSENT TYPE:** Discharge Permit **CONSENT NUMBER:** CRC254908 **CONSENT DURATION:** 35 years	Genesis understands that CRC has allocated record number CRC254908 to the discharge permit being sought by Genesis through the Fast-track Approvals Act process.
0. The activities authorised by this resource consent comprise: a. The discharge of water and associated contaminants into Lake Pūkaki from the Tekapo B Power Station; b. The discharge of water and associated contaminants into the Takapō River from the Lake T~~ae~~kapo~~ō~~ Control Structure (Gate 16) for the purposes of high flow management, to bypass Tekapo A Power Station, for Lake George Scott Water level maintenance, maintenance activities, and/or for recreational release purposes; and c. The discharge of water and associated contaminants into the Takapō River from the Lake George Scott Weir for maintenance activities and high flow management. d. Duration of consent: 35 years from the date of commencement of this resource consent. *Advice note: the activities described above do not constitute consent conditions that can be changed, cancelled or reviewed under sections 127 or 128 of the Resource Management Act 1991.*	Wording amended for consistency.
1. The activities authorised by this resource consent are located at: Legal Description	

<table>
<tr><td></td><td>Tekapo Power Scheme – Lot 1 DP 421602, Lot 1 DP 562455, Lot 1 DP 439605, Section 2 SO 567261, Lot 2 DP 364538, Lot 1 DP 407182, Lot 2 DP 407182, Section 1 SO 331257, Section 1 SO 20293, Section 1 SO 394353, Section 2 SO 394353.

Map References

<table>
<tr><th rowspan="2">Structure</th><th colspan="2">New Zealand Transverse Mercator Coordinate</th></tr>
<tr><th>Easting</th><th>Northing</th></tr>
<tr><td>Tekapo Control Structure (Gate 16)</td><td>1398034</td><td>5124317</td></tr>
<tr><td>Lake George Scott Weir</td><td>1396531</td><td>5123259</td></tr>
<tr><td>Tekapo B Power Station</td><td>1376945</td><td>5110725</td></tr>
<tr><td>Tekapo B Tailrace</td><td>1376919</td><td>5110714</td></tr>
</table>

Note: Where structure names described above are referred to in the consent conditions, then the specific map coordinates for those structures are those described above and are not included in the specific consent condition.</td><td></td></tr>
<tr><td>2.</td><td>The Consent Holder must ensure that the discharge of water and associated contaminants authorised by this resource consent is carried out in accordance with the following conditions and the conditions set out in Schedule One, which form a part of this resource consent. Where there is a difference or apparent conflict between interpreting the conditions of this resource consent and the conditions in Schedule One, the specific conditions in this resource consent prevail.</td><td></td></tr>
<tr><td>3.</td><td>The discharge of water and associated contaminants from the Tekapo B Tailrace to Lake ~~Pukaki~~Pūkaki must not exceed 130 cubic metres per second.</td><td>Genesis proposes updating the wording to be consistent with the activity described in 0 above and as used in the application</td></tr>
</table>

		documents. In this context, the "associated contaminants" include sediment entrained in water taken for the scheme operation and any other naturally occurring material included in the water used for the generation of electricity. "Pūkaki" is used as the common name for the lake.
4.	The consent holder may discharge water and associated contaminants to the Takapō River via the Tekapo Control Structure (Gate 16).	
5.	The consent holder may discharge water and associated contaminants into the Takapō River via the Lake George Scott Weir.	
6.	The consent holder must install and operate a monitoring device or system to measure discharge rates, based on a 30-minute moving average. The monitoring device or system must: a. Measure and record discharge flow rate at the locations and with the accuracy specified in the table below; b. Be connected to a system which collects and stores the data continuously; c. Record the discharge rate at each location identified in the table below at a frequency not greater than every five minutes; and d. Be verified using the method, accuracy and at the frequency identified for each location listed in the table below.	Gate 17 was incorrectly referred to in the Primary Measurement description for the Tekapo Control Structure (Gate 16) measurement. This should be corrected to refer to Gate 16 rather than Gate 17 for measurement of Gate 16 discharges.

Location	Compliance Determination Frequency	Primary Measurement	Measurement Accuracy	Verification Method	Verification Accuracy	Verification Frequency
Tekapo Control Structure (Gate 16)	30-minute moving average	Two-dimensional flow rating (Inputs: Lake Takapō level and Gate ~~17~~16 position)	± 10%	Open channel	± 10%	Annually
Lake George Scott Weir	30-minute moving average	Stage to flow rating	± 10%	Open channel	± 10%	Annually
Tekapo B Power Station	30-minute moving average	Penstock flow sensors	± 5%	Two-dimensional rating table	± 5%	Annually
				Open channel	± 10%	Five yearly

Advice note: Lake George Scott Weir verification is subject to being able to measure due to intermittent flow durations.

7.	The consent holder must provide the flow rate and volume~~water level~~ data recorded for each day in accordance with Condition 6 to the Chief Executive (or delegated nominee) Canterbury Regional Council electronically, in a format acceptable to the Council, no later than the end of the following working day.	This condition is amended to be consistent with condition 14 of the take consent, as agreed with CRC as being appropriate given their data storage and use requirements. The discharge consent conditions do not require water level monitoring so "water level" can be deleted from the condition.

	Genesis proposes adjusting "the following day" to allow for provision of data on working days.
MISCELLANEOUS	
8. The consent holder must ensure that compliance with Conditions 1 to 7 is maintained at all times, except where an alternative operating regime is necessary in order to maintain the structural integrity and safety of any of the Tekapo Power Scheme or Waitaki Power Scheme infrastructure, or public safety.	
9. Where an alternative operating regime is necessary, as provided for in Condition 8, the consent holder must take all reasonably practicable steps to comply with Conditions 3 to 7 and the conditions in Schedule One and to safely return the Tekapo Power Scheme to normal operation.	
10. Where control of the Tekapo Power Scheme cannot be returned to normal operation within two hours, the consent holder must: a. Notify the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki as soon as practicable; and b. Within two working days of the circumstances identified in this condition occurring at the Tekapo Power Scheme, provide a timetable for returning to normal operation as soon as practicable if that has not already occurred within two working days.	

SCHEDULE ONE CONDITIONS

CONSENT HOLDER: Genesis Energy Limited

Resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908 for the Tekapo Power Scheme are granted subject to the following general conditions:

Advice Note: For the avoidance of doubt, unless otherwise specified, all cross references to condition numbers in the following conditions refer to those within Schedule One.

MANAGEMENT OF LAKE TAKAPŌ LEVELS

1. Except as provided for by the specific conditions of resource consent ~~[*insert water permit consent number*]~~CRC254907, the consent holder may, at any time, operate the Tekapo Power Scheme to manage the level of Lake Takapō ~~/ Tekapo~~, for the purpose of water storage for hydro-electricity generation, between the maximum ~~control lake levels~~ and ~~the~~ minimum control lake levels specified in the following two tables, respectively:

   a. Maximum control lake levels:

Period	Lake Level (metres above mean sea level)
March	710.0
April	710.3
May	710.6
June	710.9
July	710.9
August	710.3
September to February (inclusive)	709.7

b. Minimum control lake levels:

Period	Lake Level (metres above mean sea level)
April to September (inclusive)	702.1
October to March (inclusive)	704.1

LAKE TAKAPŌ ~~/ TEKAPO~~ HIGH FLOW MANAGEMENT

2. The Consent Holder must, for the duration of this resource consent, hold a Lake Takapō High Flow Management Plan ("**HFMP**"), prepared by a suitably qualified and experienced person(s). The Tekapo Power Scheme must be operated in accordance with the HFMP when the levels of Lake Takapō exceed the maximum control lake levels specified in Condition 1(a).

3. The purpose of the HFMP, required to be prepared in accordance with Condition 2, is to document how the flows via structures controlled by the Consent Holder, being the Tekapo Intake Structure and the Tekapo Control Structure (Gate 16), the Lake George Scott Weir, and Gate 17 to the Tekapo Canal, will be managed to:

   a. Safely return Lake Takapō to the maximum control lake level required by Condition 1(a) as soon as is practicable, in the event that these maximum control lake levels are exceeded; and

   b. Protect the integrity of the Tekapo Power Scheme structures during periods when inflows to ~~the l~~Lake Takapō raise the lake level above the maximum control lake levels specified in Condition 1(a).

4. As a minimum, the HFMP must include and address the following specific matters: a. How the requirements of Conditions 10 and 11 will be implemented to reduce ~~l~~Lake Takapō levels and to protect the integrity of the Tekapo Power Scheme structures; b. The minimum combined total discharge flow from Lake Takapō via the Tekapo Intake Structure and the Tekapo Control Structure (Gate 16) that will be maintained to reduce ~~l~~Lake Takapō levels to the maximum control lake level specified in Condition 1(a); c. The rate at which the combined rates of flow to the Tekapo A Power Station (via the Tekapo Intake Structure) and to the Takapō River (via Gate 16) will be adjusted to meet the flows identified in (a) and (b) above; d. The design flow for Gate 16, Gate 17, and the Lake George Scott Weir; e. How Gate 17 will be operated during events where the water level in Lake Takapō exceeds the maximum control lake level specified in Condition 1(a); f. Management of ~~flows~~discharges from the Lake George Scott Weir; and g. Notification procedures, including parties to be notified, when the HFMP is being implemented.	Genesis proposes adjusting "flow" to "discharge" as this is regarded as the more technically correct term.
5. The updated HFMP prepared in accordance with Conditions 3 and 4 ~~must be~~: a. Must be ~~P~~prepared following consultation with the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme;	Wording adjusted to read correctly.

	b. Must be ~~P~~provided to the Chief Executive (or delegated nominee) Canterbury Regional Council within six months of the date of commencement of this resource consent for certification that all the matters in Condition 4 have been addressed; c. Must be ~~A~~accompanied by any comments from the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme that were not adopted, with reasons why; and d. Can be immediately implemented by the Consent Holder from the date that it is provided to the Council, until otherwise advised by the Council under Condition 8. *Advice Note: The Consent Holder provided a 'Draft' of the HFMP with the application. This condition requires the Draft to be updated and submitted for certification.*	
6.	The HFMP certified under Condition 5: a. May be reviewed and amended by the Consent Holder at any time as necessary for the purpose of improving the efficacy of the HFMP in achieving its purpose as specified in Condition 3; and b. Must be reviewed by a suitably qualified and experienced person(s) and amended (if this is considered necessary or appropriate) by the Consent Holder at intervals of not more than ten years.	
7.	Any review of the HFMP undertaken in accordance with condition 6 ~~must be~~: a. Must be ~~P~~prepared following consultation with the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme;	

	b. Must be ~~P~~provided to the Chief Executive (or delegated nominee) Canterbury Regional Council within six months of the date of amendment of the HFMP for certification that all the matters in Condition 4 have been addressed; c. Must be ~~A~~accompanied by any comments from the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme that were not adopted, with reasons why; and d. Can be immediately implemented by the Consent Holder from the date that it is provided to the Council, until otherwise advised by the Council under Condition 8.	
8.	If the consent holder is advised by the Canterbury Regional Council that it will not certify the HFMP provided to it under Condition 5, or any amendments to the HFMP provided under Condition 7, the consent holder must: a. Continue to implement the HFMP prepared under Conditions 3 and 4 while considering any reasons and recommendations provided by the Canterbury Regional Council; or b. In respect of any amendment to the HFMP prepared under Condition 6, ~~continue to~~ implement the ~~previously certified~~ HFMP as provided for under Condition 7(d) while considering any reasons and recommendations provided by the Canterbury Regional Council; and c. Make appropriate amendments to the HFMP where relevant to address the matters identified by the Canterbury Regional Council; and d. Following consultation with the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme, resubmit the updated or	Condition 7(d) provides for an amended HFMP to be implemented immediately until otherwise advised by the Council, particularly where changes considered necessary to protect the integrity of the Tekapo Power Scheme structures are considered necessary. This means that the relevant HFMP would not be the "previously certified HFMP". The wording in condition 7(d) was acceptable to CRC and should be reflected in condition 8(b).

	amended HFMP to the Chief Executive (or delegated nominee) Canterbury Regional Council for certification that all the matters in Condition 4 have been addressed. Where any reasons and recommendations provided by the Canterbury Regional Council are not addressed in the updated or amended HFMP, reasons for not addressing those matters must be included in the resubmitted HFMP.	
9.	When the level of Lake Takapō exceeds a maximum control lake level specified in Condition 1(a) during the relevant period, the consent holder must operate the Tekapo Power Scheme in accordance with the ~~latest certified version of the~~ HFMP prepared in accordance with the conditions of this consent so as to safely return the level of the lake to the maximum control lake level specified in Condition 1(a) (or lower) for the relevant period as soon as is practicable.	Condition 7(d) provides for an amended HFMP to be implemented immediately until otherwise advised by the Council, particularly where changes considered necessary to protect the integrity of the Tekapo Power Scheme structures are considered necessary. A HFMP "prepared in accordance with the conditions of this consent" would address both the requirements with respect to the content of the HFMP and the HFMP implementation requirements.
10.	The consent holder must use reasonable endeavours to operate Gate 16 and Gate 17 to reduce fluctuations in flow from the Lake George Scott Weir. If the Gate 17 discharge is altered while there is a flow from the Lake George Scott Weir to the Takapō River, then the Gate 16 and Gate 17 operations must be managed in accordance with conditions 11 to 14 below.	
11.	For the purpose of implementing the HFMP, the following requirements apply:	Condition 11(b) should refer to the next "discharge rate" rather than "step" as it is

a. The initial discharge rate to the Takapō River from the Lake George Scott Weir must not exceed 20 cubic metres per second for a period of not less than six hours; b. The next discharge rate ~~step~~ from the Lake George Scott Weir to the Takapō River must not exceed 45 cubic metres per second and must not be increased for at least three hours; c. Unless the ~~l~~Lake Takapō levels are 0.4 metres or more above the maximum control lake level specified in Condition 1(a), further increases in the discharge rate from the Lake George Scott Weir to the Takapō River must ensure that: i. The maximum increase in discharge rate must not exceed 20 cubic metres per second; and ii. There must be at least one hour between discharge rate changes. d. When Gate 16 is being progressively closed, and discharge is occurring from the Lake George Scott Weir at a rate at or below 20 cubic metres per second, the following minimum discharge rates from the Weir must be maintained to simulate natural recession of the Takapō ~~/ Tekapo~~ River: Step One: 20 cubic metres per second for 24 hours; Step Two: 12 cubic metres per second for 24 hours; Step Three: 5 cubic metres per second for 24 hours; Step Four: 2 cubic metres per second for 48 hours; and Step Five: cease discharge from Lake George Scott Weir.	intended that the discharge rate is held at 45 cubic metres per second for three hours, rather than a rate of 20 + 45 cubic metres per second for three hours. Thereafter, the discharge rate can increase by 20 cubic metres per second every hour.

	e. If the initial spill flow is between 10 and 20 cubic metres per second, the recession rules from the next step in Condition 11(d) below that spill flow apply.	
12.	If Gate 16 is in use in a manner that results in a discharge from the Lake George Scott Weir, the discharge ~~rate~~ from the Weir must be reduced at a maximum rate of up to 20 cubic metres per second per hour until the flow from the Weir reaches 20 cubic metres per second.	The first "rate" in the condition is not necessary as it is the "discharge" that must be reduced at the rate specified in the condition.
13.	Any discharge from the Lake George Scott Weir less than 10 cubic metres per second for less than 90 minutes in duration will not be deemed to trigger the recession rules in condition 11. For the avoidance of doubt this does not preclude notification and potential sports fish salvage in accordance with the Sports Fish Salvage Management Plan under condition 15.	
14.	If Gate 16 is in operation or ~~flows~~discharges from the Lake George Scott Weir occur when Lake Takapō ~~/ Tekapo~~ is below the maximum control lake level specified in condition 1(a), then Gate 16 and the Lake George Scott Weir must be managed in accordance with conditions 10 to 12.	"flows" adjusted to "discharges" for consistency.
SPORTS FISH SALVAGE MEASURES		
15.	The Consent Holder must prepare and implement a Sports Fish Salvage Management Plan ("**FSMP**") for the Tekapo Power Scheme following consultation with the Central South Island Fish and Game Council. The FSMP dated 13 December 2023 and submitted with the Tekapo Power Scheme applications for consent under the Fast-track Approvals Act 2024 (application number FTAA-2503-1035) must be implemented from ~~must be~~	Genesis has confirmed that the FSMP submitted with the application is a "final" version and can be implemented once the consents sought commence. A copy of the

	~~submitted to the Chief Executive (or delegated nominee) Canterbury Regional Council within six months of~~ the date of commencement of resource consents ~~*[insert consent numbers]*~~CRC254907 and CRC254908.	FSMP with a clearer Schedule 2 is included with the conditions package.
16.	The purpose of the FSMP required by Condition 15 is to describe the action(s) the Consent Holder will undertake to reduce sports fish mortality when one or more of the events in Condition 17(a), (b), or (c) apply. The FSMP must include: a. Definitions of: i. Extended Flow Events involving flow releases from Gate 16 or spill flows over the Lake George Scott Weir at defined rates and for defined periods of time; ii. Significant Stranding Events, where recorded observations by the Central South Island Fish and Game Council or the Consent Holder on regular inspection duties identify more than a defined number of stranded sports fish within the Gate 16 stilling basin, the Upper Takapō River near the Canoe Course or the Lake George Scott Weir stilling basin, or within 1.6 kilometres downstream of the Lake George Scott Weir. b. Protocol(s) for undertaking the sports fish salvage process, including ensuring that sports fish are not relocated to areas where sports fish are currently excluded; c. Communications protocol between the consent holder and Central South Island Fish and Game Council to inform of significant stranding events of sports fish, monitoring, and reporting; d. Timeframes for sports fish salvage to take place after Significant Stranding Events;	

e. Reporting provisions for sports fish salvage success including alive, dead, and remaining fish; f. Health and safety requirements and communications for any person undertaking sports fish salvage; and g. Provision for specific appendices to be included for sports fish salvage in the event that the Tekapo A draft tube and/or Tekapo Canal are to be dewatered. *Advice note: additional resource consents may be required for dewatering of the Tekapo A draft tube and/or Tekapo Canal*. *Advice note*: *where native fish are identified and it is practicable to do so, native fish should be relocated to an appropriate area.*	
17. The Consent Holder must implement the FSMP upon any of the following occurring: a. An Extended Flow Event; and b. A Significant Stranding Event at: i. Gate 16 stilling Basin; ii. Upper Takapō River Area 1 to Canoe Course; iii. George Scott Weir stilling Basin; and iv. Lower Takapō ~~/ Tekapo~~ River, Area 6 (and as shown in Schedule 2 of the FSMP); or c. When the Tekapo A draft tube and/or Tekapo Canal are dewatered.	

18.	If the consent holder intends to dewater either the Tekapo A draft tube and/or Tekapo Canal, then the Consent Holder must, following consultation with Central South Island Fish and Game Council, prepare a specific sports fish salvage plan for the dewatering activity. That plan, and any comments from Central South Island Fish and Game Council not adopted, with reasons why, must become an appendix to the FSMP and be provided to the Chief Executive (or delegated nominee) Canterbury Regional Council for information within 20 working days of finalisation of the updated FSMP. *Advice note: additional resource consents may be required for dewatering of the Tekapo A draft tube and/or Tekapo Canal*.	
19.	The Consent Holder must, following consultation with Central South Island Fish and Game Council, review the effectiveness of the FSMP in achieving the requirements of Condition 16 at intervals of not more than five years.	
20.	The Consent Holder must provide a copy of the FSMP, and any revised FSMP prepared following the review undertaken in accordance with Condition 19, and any specific sports fish salvage plan prepared in accordance with Condition 18 to the Chief Executive (or delegated nominee) Canterbury Regional Council within 20 working days of finalisation of the relevant FSMP.	
21.	The Consent Holder must, at all times, comply with the latest version of the FSMP, including any appended specific sports fish salvage plan(s) prepared under Condition 18, as provided to the Chief Executive (or delegated nominee) Canterbury Regional Council.	

RECREATIONAL RELEASES	
22. Subject to Condition 23, the Consent Holder must, at the request of Whitewater New Zealand Incorporated and the Tekapo Whitewater Trust, provide up to 4,820 cubic metres per second-hours to the Upper Takapō River, between Gate 16 and Lake George Scott, annually between 1 July and the following 30 June for in-river recreational purposes including, without limitation, white water canoeing, kayaking, rafting, sledging, and boarding.	
23. The Consent Holder's obligation to provide any particular requested recreational release required by Condition 22 ~~must~~does not apply when any of the following applies: a. Mechanical or system failures; b. Maintenance, repairs, or upgrades of the Tekapo Power Scheme; c. Extreme weather or other natural hazard events; d. Compliance with statutory requirements, including health and safety, and with the conditions of the Tekapo Power Scheme Consents, including ~~maintaining~~managing ~~l~~Lake Takapō levels; e. Operational demands within the electricity system such as requirements or restrictions on generation including, but not limited to, Islanding as required by the National Grid operator; or f. Requirements to meet security of supply if the aggregate storage for New Zealand or the South Island is below the relevant trigger level specified in System Operator policy.	Using the term "does" more accurately describes the effect of a – f on the consent holders' obligation. "managing" lake levels better reflects the requirement for the consent holder to manage lake levels to meet the conditions of consent.

However, the Consent Holder must use reasonable endeavours to supply water at a mutually agreed date within the relevant year.	
ENVIRONMENTAL COMPENSATION	
24. The consent holder must ensure an integrated Indigenous Biodiversity Enhancement Programme ("**IBEP**") is undertaken from the commencement of resource consents replacing existing Combined Waitaki Power Scheme resource consents. The objective of the IBEP is to improve the: a. Condition; b. Resilience; c. Indigenous biodiversity; d. Ecological processes; and e. Other values of f. The braided rivers including their braid plains and margins; g. Lake margins and deltas; and h. Wetland and springs associated with lakes and braided rivers within the Waitaki Catchment. *Advice note: the IBEP may be undertaken in conjunction with any other generator within the Combined Waitaki Power Scheme.*	

	Advice note: nothing in the IBEP may require the consent holder to alter the existing operation of the Tekapo Power Scheme.	
25.	The consent holder's contribution to the IBEP must have a minimum annual value of $287,500, CPI (all groups) adjusted from 1 July 2025.	
26.	In accordance with the objective of the IBEP as set out in Condition 24 the IBEP will: a) Focus work primarily, but not exclusively, on those waterbodies directly affected by the Waitaki or Tekapo power schemes; b) Incorporate the values, interests, and aspirations as expressed by the Waitaki Rūnanga; and c) Foster increased understanding of such areas and their biodiversity through research and development.	
IMPLEMENTATION OF THE INDIGENOUS BIODIVERSITY ENHANCEMENT PROGRAMME		
27.	At all times there must be a strategic plan that sets out how conditions 24 and 26 are to be achieved ("**Strategic Plan**") over a 10-year planning horizon ("**Strategic Plan Period**"). The initial Strategic Plan will cover intended actions to implement the IBEP over the first 10-year period of this consent and must be prepared and a copy supplied to the Canterbury Regional Council within six months of the date of commencement of this consent.	
28.	The Strategic Plan must be reviewed and confirmed or replaced, and a copy provided to the Canterbury Regional Council not more than ten years following preparation of the initial Strategic Plan and not more than every ten years thereafter. All reviews of the	

	Strategic Plan must be provided to the Canterbury Regional Council prior to the commencement of the period to which the Strategic Plan relates.	
29.	The Strategic Plan must: a. Be prepared by a suitably qualified and experienced person(s); and b. Be prepared in consultation with Te Rūnanga o Arowhenua, Te Rūnanga o Moeraki, Te Rūnanga o Waihao, and the Department of Conservation; and c. Identify the priorities for achieving the objective of the IBEP over the Strategic Plan Period; and d. Identify the outcomes and key implementation milestones to be achieved over the Strategic Plan Period in accordance with the priorities; and e. Identify the monitoring that will be used to demonstrate the achievement of the milestones and progress towards outcomes that are set out in the Strategic Plan over the Strategic Plan Period; and f. Identify the governance, management, and delivery arrangements for the IBEP over the Strategic Plan Period.	
30.	For each Strategic Plan prepared, prior to its finalisation, the consent holder must: a. Provide a copy of a draft Strategic Plan to the Chief Executive (or delegated nominee) Canterbury Regional Council; and b. Provide an opportunity, not less than 10 working days from receiving the Draft Strategic Plan, for the Chief Executive (or delegated nominee) Canterbury Regional	

	Council to provide comments to the consent holder on the content of the Draft Strategic Plan.	
31.	A report must be provided to the Chief Executive (or delegated nominee) Canterbury Regional Council within six months of the completion of each Strategic Plan implementation period. The report must: a. Be prepared by a suitably qualified and experienced ~~independent~~ person(s) independent of the consent holder; and b. Identify whether the key milestones and outcomes set out in the Strategic Plan were achieved; and c. Identify whether the monitoring undertaken was appropriate for demonstrating whether the milestones and outcomes in the Strategic Plan were achieved; and d. Identify if any milestones or outcomes were not achieved and, if so, the causes of non-achievement and any matters that should be revised in the next Strategic Plan; and e. Identify progress towards the outcomes identified in the Strategic Plan.	Genesis agrees that the report should be prepared by a "suitably qualified and experienced person or persons (given it is likely to be a collaborative effort) and that the "independent" qualification in the condition is not required. The implication is that the report must be completed by someone independent of the IBEP, meaning that Waitaki Rūnaka and the Department of Conservation (who are arguably the most suitably qualified and experienced persons to prepare the report) would be precluded from preparing the report. However, if the Panel considers that the report should be prepared by persons independent of the consent holder, then the terminology "independent of the consent holder" should be used wherever such independence is considered appropriate.
32.	The initial Strategic Plan must include (without limitation) a focus on the following:	

a. Takapō Catchment: i. Restoration of key representative sites on the river, other waterbodies, and connected environs within the braid plain; ii. Wetland enhancement; iii. Island creation; iv. Management of the pressures on connected environs within the braid plain (e.g. animal pests and weeds); and v. Restoration of two bay areas on Lake Takapō; b. Pūkaki, Upper and Lower Ōhau River catchments: Representative sites with animal pests and weed management in lower river reaches focused on threatened species hotspots and areas of terrestrial braid plain; and c. Lower Waitaki River Catchment: Restoration of braid plains and side streams, wetland enhancement, island creation, management of the pressures on connected environs within the braid plain (i.e. animal pests and weeds); and d. Identification and prioritisation of research to address identified knowledge gaps.	
33. To implement the Strategic Plan, an Annual Plan must be developed and implemented. The Annual Plan is to: a. Be prepared by one or more suitably qualified experts; and b. Identify the specific actions and outputs that are to be the focus for the forthcoming year covered by the Plan, consistent with the Strategic Plan.	

34. A copy of each Annual Plan must be provided to the Canterbury Regional Council prior to the implementation period for that Annual Plan.	
35. A report must be provided to the Chief Executive (or delegated nominee) Canterbury Regional Council, within three months of the end of each Annual Plan implementation period. The report must: a. Be prepared by one or more suitably qualified experts, and b. Identify the actions and outcomes that were undertaken over the previous Annual Plan period, and i. If any actions and outcomes were not achieved, identify the causes of non-achievement, and ii. If similar actions and outcomes are to be undertaken in future, identify what matters should be revised, and c. Identify progress towards achievement of the Strategic Plan.	
36. A copy of each Strategic Plan (Condition 27), report on each Strategic Plan (Condition 31), Annual Plan (Condition 33) and report on the Annual Plan (Condition 35) must be provided to Te Rūnanga o Arowhenua, Te Rūnanga o Moeraki, Te Rūnanga o Waihao, the Canterbury Regional Council and the Department of Conservation.	
LAKESHORE EROSION MANAGEMENT PLAN	
37. The consent holder must prepare and implement a Lakeshore Erosion Management Plan for Lake Takapō following consultation with Te Rūnanga o Arowhenua, Te Rūnanga o	

	Moeraki, and Te Rūnanga o Waihao. The purpose of the Lakeshore Erosion Management Plan is to provide a methodology to identify, avoid, and/or mitigate lakeshore erosion hazards resulting from the operation of the Tekapo Power Scheme through monitoring and assessment of shoreline changes.	
38.	In order to achieve the purpose set out in Condition 37, the Lakeshore Erosion Management Plan must, as a minimum, include the following matters: a. The erosion monitoring locations along Lake Takapō~~/ Tekapo~~ including those areas identified in Figures 1 and 2 of the document "Tekapo Power Scheme re-consenting: Lakeshore geomorphology and processes Existing environment and future effects", 2022, prepared by Shore Processes and Management Ltd which show the projected effects on the physical lakeshore environment of the continued operation of the scheme under the existing operating regime and which may require consideration of management options within the duration of resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908; b. The frequency of monitoring, including following significant storm events; c. The ~~l~~Lake Takapō level record and an assessment of the potential effects on the lakeshore geomorphology since the last inspection; d. A method for assessment of the wave environment since the last inspection; e. A method for assessment of shore change; f. A method for identification and quantification of the extent and magnitude of change; g. How effects attributable to the Tekapo Power Scheme will be determined;	

h. A method for identification of and timeframe for implementation of remedial options that may be required, noting that the nature of any remedial options required will depend on the location and specific erosion effect identified; and i. Provision for, and timing of, reporting on monitoring undertaken in accordance with the Lake Shore Erosion Management Plan and on the actions required in response to that monitoring. *Advice note: resource consents ~~[insert consent numbers]~~*CRC254907 and CRC254908 *do not authorise any remediation works which may require resource consent.*	
39. Within six months of the commencement of resource consents ~~[insert consent numbers]~~CRC254907 and CRC254908, the consent holder must submit the Lakeshore Erosion Management Plan to the Chief Executive (or delegated nominee) Canterbury Regional Council for certification that the matters in Condition 38(a) to (i) have been addressed.	
ANNUAL REPORTING	
40. The consent holder must prepare an Annual Report which covers the period of 1 July to the following 30 June for the activities authorised by resource consents ~~[insert consent numbers]~~CRC254907 and CRC254908 and forward that report to the Chief Executive (or delegated nominee) Canterbury Regional Council by 30 September of each year. As a minimum the Annual Report must: a. Summarise the data (including flow) collected in accordance with Conditions 11 and 12 of resource consent ~~[insert consent number]~~CRC254907, Condition 6 of resource consent ~~[insert consent number]~~CRC254908, and provide archive quality data,	Changes proposed are to clarify the relevant conditions referred to and to update the cross reference to the HFMP.

corrected to account for calibration/rating changes, maintenance, and/or to remove erroneous data, collected in accordance with those conditions; b. Provide flow verification evidence using the methods defined in Conditions 11 and 12 of resource consent ~~[*insert consent number*]~~CRC254907 and Condition 6 of resource consent ~~[*insert consent number*]~~CRC254908, including, but not limited to, the following: i. A description of the locations where verification data were collected; ii. A description of the methodology used for verification of data records for each location for which records were collected; iii. Any change in instrumentation or calibration of the measurement devices or systems used; iv. Records of physical Lake Takapō water level measurements; v. Flow gauging records; and vi. Summary statistics including stage/gate-position to flow rating(s); c. Critically analyse the information collected in accordance with the conditions of resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908, in terms of compliance and potential or actual adverse environmental effects; d. Compare data with previously collected and reported results and identify and comment on any emerging trends; e. Critically evaluate the performance of the procedures and physical mechanisms in place to avoid and/or minimise any adverse effects associated with the exercise of resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908, identify	

any improvements undertaken, and make recommendations on any additional improvements needed with respect to procedures or mechanisms relating to the exercise of resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908; f. Include the work actions undertaken and the outcomes achieved during the previous year under the Annual Plan prepared in accordance with Schedule One Condition 33, including: i. If any actions and outcomes were not achieved, identifying the causes of non-achievement; ii. If similar actions and outcomes are to be undertaken in future, identify what matters should be revised; and iii. Identifying progress towards achievement of the Strategic Plan identified in Schedule One Condition 27; g. Comment on management of any high flow events during the year that involved implementation of the HFMP required under Schedule One Condition ~~25~~, including any matters where management of such events could be improved; h. Summarise any events where water is released for recreational purposes during the reporting year; i. Comment on the results of any monitoring undertaken in accordance with Schedule One ~~c~~Condition 37 and any actions required in response to that monitoring; and	

j. Provide a summary of any maintenance and changes or upgrades to monitoring equipment used that may affect the quality or accuracy of the records collected undertaken during the reporting period.	
MANAGEMENT PLANS	
41. The Consent Holder must, at all times, operate and maintain the Tekapo Power Scheme in accordance with all management plans required in accordance with Schedule One Conditions ~~25~~, 15, and 37 submitted to, and if required, certified by the Canterbury Regional Council as part of the conditions of resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908.	Changes proposed are to clarify the relevant conditions referred to and to update the cross reference to the HFMP.
REVIEW	
42. The Canterbury Regional Council may, once per year, on any of the last five working days of March or September, serve notice on the consent holder of its intention to review the conditions of resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908 pursuant to section 128(1) of the Resource Management Act 1991 for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent(s) and which it is appropriate to deal with at a later stage.	CRC proposed that condition 42 be subject to conditions 43 and 44" which Genesis does not consider necessary as the conditions are clear as to the purpose of the review. The change to add "pursuant to section 128(1)…" to the condition as proposed by CRC is appropriate for consistency with the other review conditions in the consent.
43. At any time during the years 2032, 2039, 2046 and 2053, the Canterbury Regional Council may, following service of notice on the Consent Holder, commence a review of the conditions of resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908	

	pursuant to section 128(1) of the Resource Management Act 1991 for the following purposes: (a) To review the adequacy of monitoring required to be undertaken by the consent holder and, if necessary, to address any inadequacy by way of further or amended monitoring conditions; or (b) To review the appropriateness of any diversion, take rate, and/or take volume specified within resource consent ~~[*insert water permit consent number*]~~CRC254907 to deal with any adverse effect on the environment which may arise from the exercise of the resource consent; or (c) To review the appropriateness of any discharge rate and/or volume specified within resource consent ~~[*insert discharge permit consent number*]~~CRC254908 to deal with any adverse effect on the environment which may arise from the exercise of resource consent ~~[*insert discharge permit consent number*]~~CRC254908; or (d) To review the appropriateness of any conditions in Schedule One to give effect to the management plans required by Conditions 5, 15, and 37 in Schedule One.	
44.	The Canterbury Regional Council may, following service of notice on the consent holder, commence a review of Conditions 24 to 36 in Schedule One within six months of the delivery to the Chief Executive (or delegated nominee) Canterbury Regional Council of each Strategic Plan review report required by Condition 31 in Schedule One. As part of this review the Canterbury Regional Council may amend or add conditions to ensure that the IBEP remains effective and appropriate to achieve its objective over the duration of resource consents ~~[*insert consent numbers*]~~CRC254907 and CRC254908.	

Appendix 1: Water Quantities – Annual Volumes for Activities

Note: units = millions of m^3 per year.

		Town and Community water supplies	Industrial and commercial activities (outside municipal or town supply areas)	Tourism and recreational facilities	Agricultural and horticultural activities	Mahinga kai	Any other activities	Hydro-electricity generation
i.	Upstream of Takapō / Lake Tekapo outlet	1.6	NIL	0.6	275[A], except that: a. no more than 8 can be taken upstream of Takapō / Lake Tekapo outlet. b. no more than 8 can be taken upstream of Lake Pūkaki outlet. c. no more than 12 can be taken upstream of Lake Ōhau outlet.		NIL	All other inflows
ii.	Upstream of Lake Pūkaki outlet	2.2	0.1	0.6			NIL	All other inflows
iii.	Upstream of Lake Ōhau outlet	1.6	NIL	0.6			NIL	All other inflows except the flows that must be provided into the Ōhau River pursuant to the environmental flow regime
iv.	Upstream of Waitaki Dam but not upstream of the outlets of the glacial lakes[B]	16	6.3	9.5			6.3	All other inflows
v.	Downstream of Waitaki Dam but upstream of Black Point	3	1	2	200	315	16	All other flows except the flows that must remain in the rivers, pursuant to the environmental flow regimes
vi.	Downstream of Waitaki dam but downstream of Black Point	19	8.5	4.3	1100		112 plus an allocation of 32 reserved for the augmentation of Wainono Lagoon.	

A. While the consents to operate the Waitaki power scheme remain in force, the Upper Catchment is already fully allocated to a holder of those consents and other existing consent holders.

B. For the purposes of Rule 6 of the Waitaki Catchment Water Allocation Regional Plan (2016), the annual volumes for taking, using or diverting water from the canals leading from the glacial lakes, and those from the Ahuriri catchment, are considered downstream of the lake outlets and are covered in row iv of this table.

Genesis Comments on Resource Consent CRC254907 Draft Condition 4

To qualify as a controlled activity under the Waitaki Catchment Water Allocation Plan ("**WAP**"), the taking, using, damming or diversion of water for which consent is sought must comply with Rule 6 in the WAP. Rule 6 requires that any taking, using, damming or diversion of water must not result in the sum of the annual volumes authorised by the resource consents sought, exceeding the annual allocation to that activity in Table 5. Genesis notes that allocation of water in the Takapō catchment to the various activities identified in Table 5 does not operate in isolation and that each allocation of water must recognise the other allocations that are relevant in terms of Table 5. Under Table 5, specific annual volumes are allocated to defined activities[1] and "all other inflows" are allocated to hydro electricity generation.

For the Tekapo Power Scheme, the annual allocation of water in respect of electricity generation activities is not simply the volume of water that may be taken, used or diverted via the Tekapo Intake Structure (for use in the Tekapo A power station) or via Gate 17 and the Tekapo Canal (for use in the Tekapo B power station) but also includes inflows to Lake Takapō that are used for maintaining water levels in accordance with the WAP lake level requirements and the conditions of the consents sought by Genesis, which also includes storage of water in the lake for subsequent electricity generation. Table 5 in the WAP identifies that all inflows other than the flows allocated to activities specified in the table are allocated to hydro electricity generation, which includes the Tekapo Power Scheme. Those inflows are also available for use via the downstream Waitaki Power Scheme electricity generation activities.

Condition 4 and the inclusion of Appendix 1 (which replicates Table 5[2] in the WAP) in the proposed consent conditions provides a direct link to the allocation requirements set out in the WAP and recognises the overall requirement for "all other inflows" to be allocated to electricity generation, as outlined above. Appendix 1 is relevant to the allocation of water for the Tekapo Power Scheme as provided for in the consents sought and is a mechanism for acknowledging that "all other inflows" are allocated to electricity generation and managed (in respect of the Tekapo Power Scheme) via the range of consent conditions proposed, including take volumes, lake level requirements and high flow management. This approach has been workable in terms of the existing consents held by Genesis and the

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1 "Town and Community water supplies", "Industrial and commercial activities", "Tourism and recreational facilities", "Agricultural and horticultural activities", "mahinga kai", and "Any other activities".

2 Genesis acknowledges that Appendix 1 could be simplified to refer only to "upstream of Lake Tekapo outlet" allocations but for completeness and in recognition that allocation to all activities in the Takapō / Waitaki catchment cannot be considered in isolation of one another, Appendix 1 repeats the full Table 5 from the WAP. It notes that Meridian proposes a similar approach for the Waitaki Power Scheme consents.

implementation of the WAP and would be given effect to by Genesis via compliance with the consents sought.

The proposed condition identifies to Genesis that its allocation of water in the catchment must be considered in the context of allocations to other activities. Similarly, for anyone considering seeking an allocation of water in the catchment, the condition serves as a reminder of the allocation relevant to the consent sought by Genesis.

Dr Rob Lieffering expressed uncertainty as to how compliance with this condition/restriction is to be assessed. Compliance with the annual volumes under this condition can be determined using the data the consent holder is required to collect under the consent sought and the data CRC collects for other uses identified in Appendix 1.

Genesis notes that the CRC comments on the draft conditions dated 17 October 2025 state that they consider that this condition may be "*cumbersome to enforce as can see potential as written, for Compliance Officers to consider that all detailed calculations and demonstration of allocation may be necessary to demonstrate compliance with the condition.*" While CRC suggests that the condition may not be required at all, but is otherwise not opposed to its inclusion and suggests an advice note could be used to provide guidance to anyone reading the consent document:

> *Advice note: the consent holder may take all water in excess to that allocated at any point in time to each of the activities in the attached table. Determination of existing allocation to activities can be provided by Canterbury Regional Council: Consents Section upon request.*

Genesis does not consider that the advice note is necessary, but should the Panel decide that it would be helpful Genesis would not oppose the wording proposed by CRC.

Genesis considers that the proposed condition 4 is both workable and enforceable to the extent necessary within the scope of the conditions relevant to the water permit sought for the damming, taking, diverting, and using of water as part of the Tekapo Power Scheme.

APPENDIX 2

APPENDIX 2: CONSENT CONDITIONS

CONSENT HOLDER: Genesis Energy Limited

CONSENT TYPE: Water Permit

CONSENT NUMBER: CRC254907

CONSENT DURATION 35 years

0. The activities authorised by this resource consent comprise:

   a. The damming of the Takapō River via the Lake Takapō Control Structure (Gate 16) to control and manage the levels of Lake Takapō;

   b. The taking, diverting, and using of water from Lake Takapō via the Tekapo Intake Structure for the generation of electricity, and ancillary purposes, at the Tekapo A and B Power Stations;

   c. The damming of the Takapō River at the Lake George Scott Weir to control and maintain the water levels in Lake George Scott; and

   d. The taking and diversion of water from the Takapō River via the Tekapo Canal Control Structure (Gate 17) and using this water for the generation of electricity, and ancillary purposes, at the Tekapo B Power Station.

   Advice note: the activities described above do not constitute consent conditions that can be changed, cancelled or reviewed under sections 127 or 128 of the Resource Management Act 1991.

1. The activities authorised by this resource consent are located at:

   Legal Description

   Tekapo Power Scheme – Lot 1 DP 421602, Lot 1 DP 562455, Lot 1 DP 439605, Section 2 SO 567261, Lot 2 DP 364538, Lot 1 DP 407182, Lot 2 DP 407182, Section 1 SO 331257, Section 1 SO 20293, Section 1 SO 394353, Section 2 SO 394353.

   Map References

Structure	New Zealand Transverse Mercator Coordinate	
	Easting	Northing
Tekapo Control Structure (Gate 16)	1398034	5124317
Tekapo Intake Structure	1397200	5124969
Lake Tekapo Stilling Well	1397431	5124893
Tekapo A Power Station	1396441	5123467
Lake George Scott Weir	1396531	5123259

Structure	New Zealand Transverse Mercator Coordinate	
	Easting	Northing
Tekapo Canal Control Structure (Gate 17)	1396526	5123315
Tekapo A Tailrace	1396436	5123403
Tekapo Canal (Upstream)	1396434	5123398
Tekapo Canal (Downstream)	1378199	5111027

Note: Where structure names described above are referred to in the consent conditions, then the specific map coordinates for those structures are those described above and are not included in the specific consent condition.

GENERAL CONDITIONS

2. The Consent Holder must ensure that the damming, taking, diversion, and use of water authorised by this resource consent are carried out in accordance with the following conditions and with the conditions set out in Schedule One, which form a part of this resource consent. Where there is a difference or apparent conflict between interpreting the conditions of this resource consent and the conditions in Schedule One, the specific conditions in this resource consent prevail.

DIVERSION AND WATER TAKE CONDITIONS

3. Provided the combined rate of divert, take, and use does not exceed 130 cubic metres of water per second, the consent holder may:

   a. Divert, take, and use up to 130 cubic metres of water per second from Lake Takapō via the Tekapo Intake Structure for the generation of electricity and ancillary purposes.

   b. Divert, take, and use up to 130 cubic metres of water per second from the Takapō River via the Tekapo Canal Control Structure (Gate 17) for the generation of electricity and ancillary purposes.

4. The maximum volume of water that may be taken for the Tekapo Power Scheme must not exceed that necessary to provide for the annual allocation to activities specified in the table attached as Appendix 1, which forms part of this consent.

5. Except as provided for in Conditions 6 and 7 below, the consent holder may, at any time, take or divert water from Lake Takapō for the generation of electricity and ancillary purposes, when the Lake Takapō level exceeds the following minimum control levels:

Period	Lake Level (metres above mean sea level)
April to September (inclusive)	702.1
October to March (inclusive)	704.1

Advice note: all lake levels specified in the conditions of this resource consent are relative to Lyttelton 1937 datum.

6. When the aggregate storage for New Zealand or the South Island is below the relevant System Operator Contingent Storage Release Boundary trigger level under the Security of Supply Forecasting and Information Policy (as approved under Part 7 of the Electricity Industry Participation Code 2010), or any subsequent equivalent regulatory arrangement that enables the consent holder to access contingent storage in specified circumstances, the consent holder may take or divert water from Lake Takapō for the generation of electricity and ancillary purposes below the Lake Takapō minimum control lake levels specified in Condition 5, to a minimum lake level of 701.8 metres above mean sea level. Written notice of the reduction in lake level and its expected duration must be given to the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki:

    a. Prior to the Lake Takapō level falling below the minimum control lake levels specified in Condition 5; and

    b. Within one working day after the Lake Takapō level falls below the minimum control lake level specified in Condition 5.

7. Other than as provided for in Condition 6, if the Lake Takapō lake level is below 704.1 metres above mean sea level on 30 September, the consent holder may continue to take or divert water from Lake Takapō for the generation of electricity and ancillary purposes on and after 1 October provided the Lake Takapō 24-hour rolling average lake level does not decrease further.

8. If the Lake Takapō level has been reduced in accordance with Condition 6 or is below 704.1 metres above mean sea level in accordance with Condition 7, the consent holder must restore Lake Takapō to the consented minimum control lake level under Condition 5 as soon as practicable, after consideration of such matters including (but not limited to):

    a. Electricity generation levels required to maintain security of electricity supply in New Zealand;

    b. Operational matters, such as maintaining flows, minimum water levels, and water quality through the scheme; and

    c. Present and predicted lake inflows.

9. If the Lake Takapō level has been reduced in accordance with Condition 6 or is below 704.1 metres above mean sea level in accordance with Condition 7, the consent holder must:

a. Advise, in writing, the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki weekly of:

   i. The progress towards, and the expected timetable for, restoring Lake Takapō to the consented minimum control lake level under Condition 5;

   ii. The strategies adopted to restore Lake Takapō to the consented minimum control lake level; and

   iii. The lake level at the end of each reporting week.

b. No later than eight weeks following the completion of each activation of Condition 6 or 7, the consent holder must provide, in writing, the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki with the following information:

   i. The date and time at which Lake Takapō ~~/ Lake Tekapo~~ was lowered below the consented minimum control lake level under Condition 5;

   ii. The levels at which Lake Takapō was managed over the duration of the activation;

   iii. The duration of the activation;

   iv. The length of time following completion of the activation for Lake Takapō to be restored to the consented minimum control lake level under Condition 5; and

   v. A written description of the circumstances leading to activation.

10. If the consent holder has managed the Lake Takapō level in accordance with Conditions 6 and/or 7 in the previous 12 months, the Canterbury Regional Council may review Conditions 8 and/or 9 of this resource consent by giving notice of its intention to do so in accordance with section 128 of the Resource Management Act 1991. Such notice may be given at any time within six months following the receipt of the information required in Condition 9 for the purpose of amending or adding conditions to ensure that adverse effects of the management of the lake levels under Condition 5 are appropriately managed.

MONITORING CONDITIONS

11. The consent holder must install and operate a monitoring device or system to demonstrate compliance with the flow rate(s) specified in Condition 3 to be assessed, based on a 30-minute moving average. The monitoring device or system must:

    a. Measure and record flow rate at the locations and with the accuracy specified in the table below;

b. Be connected to a system which collects and stores the data continuously;

c. Record the flow rate at each location specified in the table below at a frequency not greater than every five minutes; and

d. Be verified using the method, accuracy, and at the frequency identified for each location listed in the table below.

Location	Compliance Determination Frequency	Measurement Accuracy	Verification Method	Verification Accuracy	Verification Frequency
Tekapo A Power Station	30-minute moving average	± 5%	Winter Kennedy data set	± 5%	Annually
			Open channel	± 10%	Five yearly
Tekapo Canal Control Structure (Gate 17)	30-minute moving average	± 10%	Open channel	± 10%	Annually

Advice Note: Tekapo A Power Station is considered a pipe flow; however, the five yearly validation will be via open channel method measured to within an accuracy of ± 10% of the actual flow.

Advice Note: Gate 17 is considered an open channel measurement device due to the means of validation being an open channel method. Gate 17 operates in both a closed orifice and open channel 'free flow' manner.

Advice Note: For the avoidance of doubt, Condition 3 requires that the total flow taken between Tekapo A and Gate 17 must not be more than 130 cubic metres per second.

12. The consent holder must install and operate a monitoring device or system to measure the Lake Takapō water level at the Lake Tekapo Stilling Well. The monitoring device or system must:

    a. Use a sensor with a resolution of no more than ±3 millimetres accuracy;

    b. Be connected to a system which collects and stores the data continuously;

    c. Record the water level at the Lake Tekapo Stilling Well at a frequency not greater than every five minutes; and

    d. Be verified every three months using a physical lake level measurement at the Lake Tekapo Stilling Well.

13. Compliance with the Lake Takapō minimum control lake levels specified in Condition 5 and the maximum and minimum control lake levels specified in Condition 1 of Schedule One, must be determined as a 60-minute moving average in relation to mean sea level.

14. The consent holder must provide the flow rate or volume and water level data recorded for each day in accordance with Conditions 11 and 12 to the Chief Executive (or

delegated nominee) Canterbury Regional Council electronically, in a format acceptable to the Council, no later than the end of the following working day.

MISCELLANEOUS

15. The consent holder must ensure that compliance with Conditions 1 to 14 is maintained at all times, except where an alternative operating regime is necessary in order to maintain the structural integrity and safety of any of the Tekapo Power Scheme or Waitaki Power Scheme infrastructure, or public safety.

16. Where an alternative operating regime is necessary, as provided for in Condition 15, the consent holder must take all reasonably practicable steps to comply with Conditions 3 to 12 and the conditions in Schedule One and to safely return the Tekapo Power Scheme to normal operation.

17. Where control of the Tekapo Power Scheme cannot be returned to normal operation within two hours, the consent holder must:

    a. Notify the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki as soon as practicable; and

    b. Within two working days of the circumstances identified in this condition occurring at the Tekapo Power Scheme, provide a timetable for returning to normal operation as soon as practicable if that has not already occurred within two working days.

Updated Conditions Following Comments Received

CONSENT HOLDER: Genesis Energy Limited

CONSENT TYPE: Discharge Permit

CONSENT NUMBER: CRC254908

CONSENT DURATION: 35 years

0. The activities authorised by this resource consent comprise:

   a. The discharge of water and associated contaminants into Lake Pūkaki from the Tekapo B Power Station;

   b. The discharge of water and associated contaminants into the Takapō River from the Lake Tekapo Control Structure (Gate 16) for the purposes of high flow management, to bypass Tekapo A Power Station, for Lake George Scott Water level maintenance, maintenance activities, and/or for recreational release purposes; and

   c. The discharge of water and associated contaminants into the Takapō River from the Lake George Scott Weir for maintenance activities and high flow management.

   d. Duration of consent: 35 years from the date of commencement of this resource consent.

   Advice note: the activities described above do not constitute consent conditions that can be changed, cancelled or reviewed under sections 127 or 128 of the Resource Management Act 1991.

1. The activities authorised by this resource consent are located at:

   Legal Description

   Tekapo Power Scheme – Lot 1 DP 421602, Lot 1 DP 562455, Lot 1 DP 439605, Section 2 SO 567261, Lot 2 DP 364538, Lot 1 DP 407182, Lot 2 DP 407182, Section 1 SO 331257, Section 1 SO 20293, Section 1 SO 394353, Section 2 SO 394353.

   Map References

Structure	**New Zealand Transverse Mercator Coordinate**	
	Easting	**Northing**
Tekapo Control Structure (Gate 16)	1398034	5124317
Lake George Scott Weir	1396531	5123259
Tekapo B Power Station	1376945	5110725
Tekapo B Tailrace	1376919	5110714

Note: Where structure names described above are referred to in the consent conditions, then the specific map coordinates for those structures are those described above and are not included in the specific consent condition.

2. The Consent Holder must ensure that the discharge of water and associated contaminants authorised by this resource consent is carried out in accordance with the following conditions and the conditions set out in Schedule One, which form a part of this resource consent. Where there is a difference or apparent conflict between interpreting the conditions of this resource consent and the conditions in Schedule One, the specific conditions in this resource consent prevail.

3. The discharge of water and associated contaminants from the Tekapo B Tailrace to Lake Pūkaki must not exceed 130 cubic metres per second.

4. The consent holder may discharge water and associated contaminants to the Takapō River via the Tekapo Control Structure (Gate 16).

5. The consent holder may discharge water and associated contaminants into the Takapō River via the Lake George Scott Weir.

6. The consent holder must install and operate a monitoring device or system to measure discharge rates, based on a 30-minute moving average. The monitoring device or system must:

    a. Measure and record discharge flow rate at the locations and with the accuracy specified in the table below;

    b. Be connected to a system which collects and stores the data continuously;

    c. Record the discharge rate at each location identified in the table below at a frequency not greater than every five minutes; and

    d. Be verified using the method, accuracy and at the frequency identified for each location listed in the table below.

Location	Compliance Determination Frequency	Primary Measurement	Measurement Accuracy	Verification Method	Verification Accuracy	Verification Frequency
Tekapo Control Structure (Gate 16)	30-minute moving average	Two-dimensional flow rating (Inputs: Lake Takapō level and Gate 16 position)	± 10%	Open channel	± 10%	Annually
Lake George Scott Weir	30-minute moving average	Stage to flow rating	± 10%	Open channel	± 10%	Annually
Tekapo B Power Station	30-minute moving average	Penstock flow sensors	± 5%	Two-dimensional rating table	± 5%	Annually
				Open channel	± 10%	Five yearly

Advice note: Lake George Scott Weir verification is subject to being able to measure due to intermittent flow durations.

7. The consent holder must provide the flow rate and volume data recorded for each day in accordance with Condition 6 to the Chief Executive (or delegated nominee) Canterbury Regional Council electronically, in a format acceptable to the Council, no later than the end of the following working day.

MISCELLANEOUS

8. The consent holder must ensure that compliance with Conditions 1 to 7 is maintained at all times, except where an alternative operating regime is necessary in order to maintain the structural integrity and safety of any of the Tekapo Power Scheme or Waitaki Power Scheme infrastructure, or public safety.

9. Where an alternative operating regime is necessary, as provided for in Condition 8, the consent holder must take all reasonably practicable steps to comply with Conditions 3 to 7 and the conditions in Schedule One and to safely return the Tekapo Power Scheme to normal operation.

10. Where control of the Tekapo Power Scheme cannot be returned to normal operation within two hours, the consent holder must:

    a. Notify the Chief Executive (or delegated nominee) Canterbury Regional Council, Te Rūnanga o Arowhenua, Te Rūnanga o Waihao, and Te Rūnanga o Moeraki as soon as practicable; and

    b. Within two working days of the circumstances identified in this condition occurring at the Tekapo Power Scheme, provide a timetable for returning to normal operation as soon as practicable if that has not already occurred within two working days.

SCHEDULE ONE CONDITIONS

CONSENT HOLDER: Genesis Energy Limited

Resource consents CRC254907 and CRC254908 for the Tekapo Power Scheme are granted subject to the following general conditions:

Advice Note: For the avoidance of doubt, unless otherwise specified, all cross references to condition numbers in the following conditions refer to those within Schedule One.

MANAGEMENT OF LAKE TAKAPŌ LEVELS

1. Except as provided for by the specific conditions of resource consent CRC254907, the consent holder may, at any time, operate the Tekapo Power Scheme to manage the level of Lake Takapō, for the purpose of water storage for hydro-electricity generation, between the maximum and minimum control lake levels specified in the following two tables, respectively:

    a. Maximum control lake levels:

Period	Lake Level (metres above mean sea level)
March	710.0
April	710.3
May	710.6
June	710.9
July	710.9
August	710.3
September to February (inclusive)	709.7

    b. Minimum control lake levels:

Period	Lake Level (metres above mean sea level)
April to September (inclusive)	702.1
October to March (inclusive)	704.1

LAKE TAKAPŌ HIGH FLOW MANAGEMENT

2. The Consent Holder must, for the duration of this resource consent, hold a Lake Takapō High Flow Management Plan ("**HFMP**"), prepared by a suitably qualified and experienced person(s). The Tekapo Power Scheme must be operated in accordance with the HFMP when the levels of Lake Takapō exceed the maximum control lake levels specified in Condition 1(a).

3. The purpose of the HFMP, required to be prepared in accordance with Condition 2, is to document how the flows via structures controlled by the Consent Holder, being the

Tekapo Intake Structure and the Tekapo Control Structure (Gate 16), the Lake George Scott Weir, and Gate 17 to the Tekapo Canal, will be managed to:

a. Safely return Lake Takapō to the maximum control lake level required by Condition 1(a) as soon as is practicable, in the event that these maximum control lake levels are exceeded; and

b. Protect the integrity of the Tekapo Power Scheme structures during periods when inflows to Lake Takapō raise the lake level above the maximum control lake levels specified in Condition 1(a).

4. As a minimum, the HFMP must include and address the following specific matters:

a. How the requirements of Conditions 10 and 11 will be implemented to reduce Lake Takapō levels and to protect the integrity of the Tekapo Power Scheme structures;

b. The minimum combined total discharge flow from Lake Takapō via the Tekapo Intake Structure and the Tekapo Control Structure (Gate 16) that will be maintained to reduce Lake Takapō levels to the maximum control lake level specified in Condition 1(a);

c. The rate at which the combined rates of flow to the Tekapo A Power Station (via the Tekapo Intake Structure) and to the Takapō River (via Gate 16) will be adjusted to meet the flows identified in (a) and (b) above;

d. The design flow for Gate 16, Gate 17, and the Lake George Scott Weir;

e. How Gate 17 will be operated during events where the water level in Lake Takapō exceeds the maximum control lake level specified in Condition 1(a);

f. Management of discharges from the Lake George Scott Weir; and

g. Notification procedures, including parties to be notified, when the HFMP is being implemented.

5. The updated HFMP prepared in accordance with Conditions 3 and 4:

a. Must be prepared following consultation with the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme;

b. Must be provided to the Chief Executive (or delegated nominee) Canterbury Regional Council within six months of the date of commencement of this resource consent for certification that all the matters in Condition 4 have been addressed;

c. Must be accompanied by any comments from the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme that were not adopted, with reasons why; and

d. Can be immediately implemented by the Consent Holder from the date that it is provided to the Council, until otherwise advised by the Council under Condition 8.

Advice Note: The Consent Holder provided a 'Draft' of the HFMP with the application. This condition requires the Draft to be updated and submitted for certification.

6. The HFMP certified under Condition 5:

   a. May be reviewed and amended by the Consent Holder at any time as necessary for the purpose of improving the efficacy of the HFMP in achieving its purpose as specified in Condition 3; and

   b. Must be reviewed by a suitably qualified and experienced person(s) and amended (if this is considered necessary or appropriate) by the Consent Holder at intervals of not more than ten years.

7. Any review of the HFMP undertaken in accordance with condition 6:

   a. Must be prepared following consultation with the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme;

   b. Must be provided to the Chief Executive (or delegated nominee) Canterbury Regional Council within six months of the date of amendment of the HFMP for certification that all the matters in Condition 4 have been addressed;

   c. Must be accompanied by any comments from the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme that were not adopted, with reasons why; and

   d. Can be immediately implemented by the Consent Holder from the date that it is provided to the Council, until otherwise advised by the Council under Condition 8.

8. If the consent holder is advised by the Canterbury Regional Council that it will not certify the HFMP provided to it under Condition 5, or any amendments to the HFMP provided under Condition 7, the consent holder must:

   a. Continue to implement the HFMP prepared under Conditions 3 and 4 while considering any reasons and recommendations provided by the Canterbury Regional Council; or

   b. In respect of any amendment to the HFMP prepared under Condition 6, implement the HFMP as provided for under Condition 7(d) while considering any reasons and recommendations provided by the Canterbury Regional Council; and

   c. Make appropriate amendments to the HFMP where relevant to address the matters identified by the Canterbury Regional Council; and

   d. Following consultation with the Canterbury Regional Council, the Mackenzie District Council, and the operators of the Waitaki Power Scheme, resubmit the

updated or amended HFMP to the Chief Executive (or delegated nominee) Canterbury Regional Council for certification that all the matters in Condition 4 have been addressed. Where any reasons and recommendations provided by the Canterbury Regional Council are not addressed in the updated or amended HFMP, reasons for not addressing those matters must be included in the resubmitted HFMP.

9. When the level of Lake Takapō exceeds a maximum control lake level specified in Condition 1(a) during the relevant period, the consent holder must operate the Tekapo Power Scheme in accordance with the HFMP prepared in accordance with the conditions of this consent so as to safely return the level of the lake to the maximum control lake level specified in Condition 1(a) (or lower) for the relevant period as soon as is practicable.

10. The consent holder must use reasonable endeavours to operate Gate 16 and Gate 17 to reduce fluctuations in flow from the Lake George Scott Weir. If the Gate 17 discharge is altered while there is a flow from the Lake George Scott Weir to the Takapō River, then the Gate 16 and Gate 17 operations must be managed in accordance with conditions 11 to 14 below.

11. For the purpose of implementing the HFMP, the following requirements apply:

    a. The initial discharge rate to the Takapō River from the Lake George Scott Weir must not exceed 20 cubic metres per second for a period of not less than six hours;

    b. The next discharge rate from the Lake George Scott Weir to the Takapō River must not exceed 45 cubic metres per second and must not be increased for at least three hours;

    c. Unless the Lake Takapō levels are 0.4 metres or more above the maximum control lake level specified in Condition 1(a), further increases in the discharge rate from the Lake George Scott Weir to the Takapō River must ensure that:

        i. The maximum increase in discharge rate must not exceed 20 cubic metres per second; and

        ii. There must be at least one hour between discharge rate changes.

    d. When Gate 16 is being progressively closed, and discharge is occurring from the Lake George Scott Weir at a rate at or below 20 cubic metres per second, the following minimum discharge rates from the Weir must be maintained to simulate natural recession of the Takapō River:

        Step One: 20 cubic metres per second for 24 hours;

        Step Two: 12 cubic metres per second for 24 hours;

Step Three: 5 cubic metres per second for 24 hours;

Step Four: 2 cubic metres per second for 48 hours; and

Step Five: cease discharge from Lake George Scott Weir.

e. If the initial spill flow is between 10 and 20 cubic metres per second, the recession rules from the next step in Condition 11(d) below that spill flow apply.

12. If Gate 16 is in use in a manner that results in a discharge from the Lake George Scott Weir, the discharge from the Weir must be reduced at a maximum rate of up to 20 cubic metres per second per hour until the flow from the Weir reaches 20 cubic metres per second.

13. Any discharge from the Lake George Scott Weir less than 10 cubic metres per second for less than 90 minutes in duration will not be deemed to trigger the recession rules in condition 11. For the avoidance of doubt this does not preclude notification and potential sports fish salvage in accordance with the Sports Fish Salvage Management Plan under condition 15.

14. If Gate 16 is in operation or discharges from the Lake George Scott Weir occur when Lake Takapō is below the maximum control lake level specified in condition 1(a), then Gate 16 and the Lake George Scott Weir must be managed in accordance with conditions 10 to 12.

SPORTS FISH SALVAGE MEASURES

15. The Consent Holder must prepare and implement a Sports Fish Salvage Management Plan ("**FSMP**") for the Tekapo Power Scheme following consultation with the Central South Island Fish and Game Council. The FSMP dated 13 December 2023 and submitted with the Tekapo Power Scheme applications for consent under the Fast-track Approvals Act 2024 (application number FTAA-2503-1035) must be implemented from the date of commencement of resource consents CRC254907 and CRC254908.

16. The purpose of the FSMP required by Condition 15 is to describe the action(s) the Consent Holder will undertake to reduce sports fish mortality when one or more of the events in Condition 17(a), (b), or (c) apply. The FSMP must include:

a. Definitions of:

i. Extended Flow Events involving flow releases from Gate 16 or spill flows over the Lake George Scott Weir at defined rates and for defined periods of time;

ii. Significant Stranding Events, where recorded observations by the Central South Island Fish and Game Council or the Consent Holder on regular inspection duties identify more than a defined number of stranded sports fish

within the Gate 16 stilling basin, the Upper Takapō River near the Canoe Course or the Lake George Scott Weir stilling basin, or within 1.6 kilometres downstream of the Lake George Scott Weir.

b. Protocol(s) for undertaking the sports fish salvage process, including ensuring that sports fish are not relocated to areas where sports fish are currently excluded;

c. Communications protocol between the consent holder and Central South Island Fish and Game Council to inform of significant stranding events of sports fish, monitoring, and reporting;

d. Timeframes for sports fish salvage to take place after Significant Stranding Events;

e. Reporting provisions for sports fish salvage success including alive, dead, and remaining fish;

f. Health and safety requirements and communications for any person undertaking sports fish salvage; and

g. Provision for specific appendices to be included for sports fish salvage in the event that the Tekapo A draft tube and/or Tekapo Canal are to be dewatered.

Advice note: additional resource consents may be required for dewatering of the Tekapo A draft tube and/or Tekapo Canal.

Advice note: *where native fish are identified and it is practicable to do so, native fish should be relocated to an appropriate area.*

17. The Consent Holder must implement the FSMP upon any of the following occurring:

a. An Extended Flow Event; and

b. A Significant Stranding Event at:

i. Gate 16 stilling Basin;

ii. Upper Takapō River Area 1 to Canoe Course;

iii. George Scott Weir stilling Basin; and

iv. Lower Takapō River, Area 6 (and as shown in Schedule 2 of the FSMP); or

c. When the Tekapo A draft tube and/or Tekapo Canal are dewatered.

18. If the consent holder intends to dewater either the Tekapo A draft tube and/or Tekapo Canal, then the Consent Holder must, following consultation with Central South Island Fish and Game Council, prepare a specific sports fish salvage plan for the dewatering activity. That plan, and any comments from Central South Island Fish and Game Council not adopted, with reasons why, must become an appendix to the FSMP and be provided to the Chief Executive (or delegated nominee) Canterbury Regional Council for information within 20 working days of finalisation of the updated FSMP.

Advice note: additional resource consents may be required for dewatering of the Tekapo A draft tube and/or Tekapo Canal.

19. The Consent Holder must, following consultation with Central South Island Fish and Game Council, review the effectiveness of the FSMP in achieving the requirements of Condition 16 at intervals of not more than five years.

20. The Consent Holder must provide a copy of the FSMP, and any revised FSMP prepared following the review undertaken in accordance with Condition 19, and any specific sports fish salvage plan prepared in accordance with Condition 18 to the Chief Executive (or delegated nominee) Canterbury Regional Council within 20 working days of finalisation of the relevant FSMP.

21. The Consent Holder must, at all times, comply with the latest version of the FSMP, including any appended specific sports fish salvage plan(s) prepared under Condition 18, as provided to the Chief Executive (or delegated nominee) Canterbury Regional Council.

RECREATIONAL RELEASES

22. Subject to Condition 23, the Consent Holder must, at the request of Whitewater New Zealand Incorporated and the Tekapo Whitewater Trust, provide up to 4,820 cubic metres per second-hours to the Upper Takapō River, between Gate 16 and Lake George Scott, annually between 1 July and the following 30 June for in-river recreational purposes including, without limitation, white water canoeing, kayaking, rafting, sledging, and boarding.

23. The Consent Holder's obligation to provide any particular requested recreational release required by Condition 22 does not apply when any of the following applies:

    a. Mechanical or system failures;

    b. Maintenance, repairs, or upgrades of the Tekapo Power Scheme;

    c. Extreme weather or other natural hazard events;

    d. Compliance with statutory requirements, including health and safety, and with the conditions of the Tekapo Power Scheme Consents, including managing Lake Takapō levels;

    e. Operational demands within the electricity system such as requirements or restrictions on generation including, but not limited to, Islanding as required by the National Grid operator; or

    f. Requirements to meet security of supply if the aggregate storage for New Zealand or the South Island is below the relevant trigger level specified in System Operator policy.

However, the Consent Holder must use reasonable endeavours to supply water at a mutually agreed date within the relevant year.

ENVIRONMENTAL COMPENSATION

24. The consent holder must ensure an integrated Indigenous Biodiversity Enhancement Programme ("**IBEP**") is undertaken from the commencement of resource consents replacing existing Combined Waitaki Power Scheme resource consents. The objective of the IBEP is to improve the:

    a. Condition;

    b. Resilience;

    c. Indigenous biodiversity;

    d. Ecological processes; and

    e. Other values

    of

    f. The braided rivers including their braid plains and margins;

    g. Lake margins and deltas; and

    h. Wetland and springs associated with lakes and braided rivers

    within the Waitaki Catchment.

    Advice note: the IBEP may be undertaken in conjunction with any other generator within the Combined Waitaki Power Scheme.

    Advice note: nothing in the IBEP may require the consent holder to alter the existing operation of the Tekapo Power Scheme.

25. The consent holder's contribution to the IBEP must have a minimum annual value of $287,500, CPI (all groups) adjusted from 1 July 2025.

26. In accordance with the objective of the IBEP as set out in Condition 24 the IBEP will:

    a) Focus work primarily, but not exclusively, on those waterbodies directly affected by the Waitaki or Tekapo power schemes;

    b) Incorporate the values, interests, and aspirations as expressed by the Waitaki Rūnanga; and

    c) Foster increased understanding of such areas and their biodiversity through research and development.

IMPLEMENTATION OF THE INDIGENOUS BIODIVERSITY ENHANCEMENT PROGRAMME

27. At all times there must be a strategic plan that sets out how conditions 24 and 26 are to be achieved ("**Strategic Plan**") over a 10-year planning horizon ("**Strategic Plan Period**"). The initial Strategic Plan will cover intended actions to implement the IBEP over the first 10-year period of this consent and must be prepared and a copy supplied to the Canterbury Regional Council within six months of the date of commencement of this consent.

28. The Strategic Plan must be reviewed and confirmed or replaced, and a copy provided to the Canterbury Regional Council not more than ten years following preparation of the initial Strategic Plan and not more than every ten years thereafter. All reviews of the Strategic Plan must be provided to the Canterbury Regional Council prior to the commencement of the period to which the Strategic Plan relates.

29. The Strategic Plan must:

    a. Be prepared by a suitably qualified and experienced person(s); and

    b. Be prepared in consultation with Te Rūnanga o Arowhenua, Te Rūnanga o Moeraki, Te Rūnanga o Waihao, and the Department of Conservation; and

    c. Identify the priorities for achieving the objective of the IBEP over the Strategic Plan Period; and

    d. Identify the outcomes and key implementation milestones to be achieved over the Strategic Plan Period in accordance with the priorities; and

    e. Identify the monitoring that will be used to demonstrate the achievement of the milestones and progress towards outcomes that are set out in the Strategic Plan over the Strategic Plan Period; and

    f. Identify the governance, management, and delivery arrangements for the IBEP over the Strategic Plan Period.

30. For each Strategic Plan prepared, prior to its finalisation, the consent holder must:

    a. Provide a copy of a draft Strategic Plan to the Chief Executive (or delegated nominee) Canterbury Regional Council; and

    b. Provide an opportunity, not less than 10 working days from receiving the Draft Strategic Plan, for the Chief Executive (or delegated nominee) Canterbury Regional Council to provide comments to the consent holder on the content of the Draft Strategic Plan.

31. A report must be provided to the Chief Executive (or delegated nominee) Canterbury Regional Council within six months of the completion of each Strategic Plan implementation period. The report must:

    a. Be prepared by a suitably qualified and experienced person(s) independent of the consent holder; and

    b. Identify whether the key milestones and outcomes set out in the Strategic Plan were achieved; and

    c. Identify whether the monitoring undertaken was appropriate for demonstrating whether the milestones and outcomes in the Strategic Plan were achieved; and

    d. Identify if any milestones or outcomes were not achieved and, if so, the causes of non-achievement and any matters that should be revised in the next Strategic Plan; and

    e. Identify progress towards the outcomes identified in the Strategic Plan.

32. The initial Strategic Plan must include (without limitation) a focus on the following:

    a. Takapō Catchment:

        i. Restoration of key representative sites on the river, other waterbodies, and connected environs within the braid plain;

        ii. Wetland enhancement;

        iii. Island creation;

        iv. Management of the pressures on connected environs within the braid plain (e.g. animal pests and weeds); and

        v. Restoration of two bay areas on Lake Takapō;

    b. Pūkaki, Upper and Lower Ōhau River catchments: Representative sites with animal pests and weed management in lower river reaches focused on threatened species hotspots and areas of terrestrial braid plain; and

    c. Lower Waitaki River Catchment: Restoration of braid plains and side streams, wetland enhancement, island creation, management of the pressures on connected environs within the braid plain (i.e. animal pests and weeds); and

    d. Identification and prioritisation of research to address identified knowledge gaps.

33. To implement the Strategic Plan, an Annual Plan must be developed and implemented. The Annual Plan is to:

    a. Be prepared by one or more suitably qualified experts; and

b. Identify the specific actions and outputs that are to be the focus for the forthcoming year covered by the Plan, consistent with the Strategic Plan.

34. A copy of each Annual Plan must be provided to the Canterbury Regional Council prior to the implementation period for that Annual Plan.

35. A report must be provided to the Chief Executive (or delegated nominee) Canterbury Regional Council, within three months of the end of each Annual Plan implementation period. The report must:

    a. Be prepared by one or more suitably qualified experts, and

    b. Identify the actions and outcomes that were undertaken over the previous Annual Plan period, and

        i. If any actions and outcomes were not achieved, identify the causes of non-achievement, and

        ii. If similar actions and outcomes are to be undertaken in future, identify what matters should be revised, and

    c. Identify progress towards achievement of the Strategic Plan.

36. A copy of each Strategic Plan (Condition 27), report on each Strategic Plan (Condition 31), Annual Plan (Condition 33) and report on the Annual Plan (Condition 35) must be provided to Te Rūnanga o Arowhenua, Te Rūnanga o Moeraki, Te Rūnanga o Waihao, the Canterbury Regional Council and the Department of Conservation.

LAKESHORE EROSION MANAGEMENT PLAN

37. The consent holder must prepare and implement a Lakeshore Erosion Management Plan for Lake Takapō following consultation with Te Rūnanga o Arowhenua, Te Rūnanga o Moeraki, and Te Rūnanga o Waihao. The purpose of the Lakeshore Erosion Management Plan is to provide a methodology to identify, avoid, and/or mitigate lakeshore erosion hazards resulting from the operation of the Tekapo Power Scheme through monitoring and assessment of shoreline changes.

38. In order to achieve the purpose set out in Condition 37, the Lakeshore Erosion Management Plan must, as a minimum, include the following matters:

    a. The erosion monitoring locations along Lake Takapō including those areas identified in Figures 1 and 2 of the document “Tekapo Power Scheme re-consenting: Lakeshore geomorphology and processes Existing environment and future effects”, 2022, prepared by Shore Processes and Management Ltd which show the projected effects on the physical lakeshore environment of the continued operation of the scheme under the existing operating regime and which may

require consideration of management options within the duration of resource consents CRC254907 and CRC254908;

b. The frequency of monitoring, including following significant storm events;

c. The Lake Takapō level record and an assessment of the potential effects on the lakeshore geomorphology since the last inspection;

d. A method for assessment of the wave environment since the last inspection;

e. A method for assessment of shore change;

f. A method for identification and quantification of the extent and magnitude of change;

g. How effects attributable to the Tekapo Power Scheme will be determined;

h. A method for identification of and timeframe for implementation of remedial options that may be required, noting that the nature of any remedial options required will depend on the location and specific erosion effect identified; and

i. Provision for, and timing of, reporting on monitoring undertaken in accordance with the Lake Shore Erosion Management Plan and on the actions required in response to that monitoring.

Advice note: resource consents CRC254907 and CRC254908 *do not authorise any remediation works which may require resource consent.*

39. Within six months of the commencement of resource consents CRC254907 and CRC254908, the consent holder must submit the Lakeshore Erosion Management Plan to the Chief Executive (or delegated nominee) Canterbury Regional Council for certification that the matters in Condition 38(a) to (i) have been addressed.

ANNUAL REPORTING

40. The consent holder must prepare an Annual Report which covers the period of 1 July to the following 30 June for the activities authorised by resource consents CRC254907 and CRC254908 and forward that report to the Chief Executive (or delegated nominee) Canterbury Regional Council by 30 September of each year. As a minimum the Annual Report must:

a. Summarise the data (including flow) collected in accordance with Conditions 11 and 12 of resource consent CRC254907, Condition 6 of resource consent CRC254908, and provide archive quality data, corrected to account for calibration/rating changes, maintenance, and/or to remove erroneous data, collected in accordance with those conditions;

b. Provide flow verification evidence using the methods defined in Conditions 11 and 12 of resource consent CRC254907 and Condition 6 of resource consent CRC254908, including, but not limited to, the following:

   i. A description of the locations where verification data were collected;

   ii. A description of the methodology used for verification of data records for each location for which records were collected;

   iii. Any change in instrumentation or calibration of the measurement devices or systems used;

   iv. Records of physical Lake Takapō water level measurements;

   v. Flow gauging records; and

   vi. Summary statistics including stage/gate-position to flow rating(s);

c. Critically analyse the information collected in accordance with the conditions of resource consents CRC254907 and CRC254908, in terms of compliance and potential or actual adverse environmental effects;

d. Compare data with previously collected and reported results and identify and comment on any emerging trends;

e. Critically evaluate the performance of the procedures and physical mechanisms in place to avoid and/or minimise any adverse effects associated with the exercise of resource consents CRC254907 and CRC254908, identify any improvements undertaken, and make recommendations on any additional improvements needed with respect to procedures or mechanisms relating to the exercise of resource consents CRC254907 and CRC254908;

f. Include the work actions undertaken and the outcomes achieved during the previous year under the Annual Plan prepared in accordance with Schedule One Condition 33, including:

   i. If any actions and outcomes were not achieved, identifying the causes of non-achievement;

   ii. If similar actions and outcomes are to be undertaken in future, identify what matters should be revised; and

   iii. Identifying progress towards achievement of the Strategic Plan identified in Schedule One Condition 27;

g. Comment on management of any high flow events during the year that involved implementation of the HFMP required under Schedule One Condition 2, including any matters where management of such events could be improved;

h. Summarise any events where water is released for recreational purposes during the reporting year;

i. Comment on the results of any monitoring undertaken in accordance with Schedule One Condition 37 and any actions required in response to that monitoring; and

j. Provide a summary of any maintenance and changes or upgrades to monitoring equipment used that may affect the quality or accuracy of the records collected undertaken during the reporting period.

MANAGEMENT PLANS

41. The Consent Holder must, at all times, operate and maintain the Tekapo Power Scheme in accordance with all management plans required in accordance with Schedule One Conditions ~~25~~, 15, and 37 submitted to, and if required, certified by the Canterbury Regional Council as part of the conditions of resource consents CRC254907 and CRC254908.

REVIEW

42. The Canterbury Regional Council may, once per year, on any of the last five working days of March or September, serve notice on the consent holder of its intention to review the conditions of resource consents CRC254907 and CRC254908 pursuant to section 128(1) of the Resource Management Act 1991 for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent(s) and which it is appropriate to deal with at a later stage.

43. At any time during the years 2032, 2039, 2046 and 2053, the Canterbury Regional Council may, following service of notice on the Consent Holder, commence a review of the conditions of resource consents CRC254907 and CRC254908 pursuant to section 128(1) of the Resource Management Act 1991 for the following purposes:

(a) To review the adequacy of monitoring required to be undertaken by the consent holder and, if necessary, to address any inadequacy by way of further or amended monitoring conditions; or

(b) To review the appropriateness of any diversion, take rate, and/or take volume specified within resource consent CRC254907 to deal with any adverse effect on the environment which may arise from the exercise of the resource consent; or

(c) To review the appropriateness of any discharge rate and/or volume specified within resource consent CRC254908 to deal with any adverse effect on the environment which may arise from the exercise of resource consent CRC254908; or

(d) To review the appropriateness of any conditions in Schedule One to give effect to the management plans required by Conditions 5, 15, and 37 in Schedule One.

44. The Canterbury Regional Council may, following service of notice on the consent holder, commence a review of Conditions 24 to 36 in Schedule One within six months of the delivery to the Chief Executive (or delegated nominee) Canterbury Regional Council of each Strategic Plan review report required by Condition 31 in Schedule One. As part of this review the Canterbury Regional Council may amend or add conditions to ensure that the IBEP remains effective and appropriate to achieve its objective over the duration of resource consents CRC254907 and CRC254908.

Appendix 1: Water Quantities – Annual Volumes for Activities

Note: units = millions of m^3 per year.

		Town and Community water supplies	Industrial and commercial activities (outside municipal or town supply areas)	Tourism and recreational facilities	Agricultural and horticultural activities	Mahinga kai	Any other activities	Hydro-electricity generation
i.	Upstream of Takapō / Lake Tekapo outlet	1.6	NIL	0.6	275[A], except that: a. no more than 8 can be taken upstream of Takapō / Lake Tekapo outlet. b. no more than 8 can be taken upstream of Lake Pūkaki outlet. c. no more than 12 can be taken upstream of Lake Ōhau outlet.		NIL	All other inflows
ii.	Upstream of Lake Pūkaki outlet	2.2	0.1	0.6			NIL	All other inflows
iii.	Upstream of Lake Ōhau outlet	1.6	NIL	0.6			NIL	All other inflows except the flows that must be provided into the Ōhau River pursuant to the environmental flow regime
iv.	Upstream of Waitaki Dam but not upstream of the outlets of the glacial lakes[B]	16	6.3	9.5			6.3	All other inflows
v.	Downstream of Waitaki Dam but upstream of Black Point	3	1	2	200	315	16	All other flows except the flows that must remain in the rivers, pursuant to the environmental flow regimes
vi.	Downstream of Waitaki dam but downstream of Black Point	19	8.5	4.3	1100		112 plus an allocation of 32 reserved for the augmentation of Wainono Lagoon.	

A. While the consents to operate the Waitaki power scheme remain in force, the Upper Catchment is already fully allocated to a holder of those consents and other existing consent holders.

B. For the purposes of Rule 6 of the Waitaki Catchment Water Allocation Regional Plan (2016), the annual volumes for taking, using or diverting water from the canals leading from the glacial lakes, and those from the Ahuriri catchment, are considered downstream of the lake outlets and are covered in row iv of this table.

APPENDIX 3

Dated: 13 December 2023

Sports Fish Salvage Management Plan for the Tekapo Power Scheme

Background

The Tekapo Power Scheme (**TekPS**) operates within sports fish habitat. Sports fish, especially brown and rainbow trout, migrate from Lake Takapō into and within the scheme under regular generation and during alternative operational practices. When alternative operations occur within the scheme, sports fish may be subject to temporary and ongoing stranding and sports fish mortalities can occur. However, overall, the TekPS provides one of the most popular and successful sports fisheries in New Zealand and this Sports Fish Salvage Management Plan (**FSMP**) is viewed in that context.

The FSMP was developed by Genesis Energy Limited (**Genesis**) and Central South Island Fish & Game Council (**CSIFGC**) and is provided for in the Agreement in relation to the Tekapo Power Scheme between Genesis and CSIFGC dated [7/02/24] (**Agreement**) in recognition of the significant value of the canal sports fishery. The Agreement identifies that Genesis is responsible for sports fish salvage and the funding for it). The FSMP is subject to, and governed by, the provisions in the Agreement. Through application of the FSMP, CSIFGC and Genesis are assured that sports fish are salvaged, handled, and released in a timely and efficient manner to provide for both the health of fish that are stranded, and for the return to normal power scheme operations.

Observations and monitoring of stranding events have informed the development of this FSMP. CSIFGC produced a summary report (Adams, 2021) of outcomes of sports fish salvage for the period 2013-2021 undertaken as a result of sports fish stranding in the TekPS. The FSMP aims to ensure sports fish are relocated to permanent water promptly after flow events specified in clauses 1 to 7 of the FSMP. Sports fish stranding may occur during other events and ongoing communication between CSIFGC and Genesis required by the Agreement will provide for timely and efficient salvage. Significant stranding event responses relate to four locations specified in clause 2.2 below. These have been distinguished based on the numbers of fish identified as being potentially stranded and the safety issues associated with anglers attempting to catch them. Sports fish salvage may also be required at other locations on an as agreed basis, recognising the significant benefits of the canal fishery.

The FSMP is intended to be an adaptable document and CSIFGC and Genesis must review the FSMP at least once every 5 years as part of the relevant annual meeting as provided for in clause 8.2 of the Agreement. Ongoing stranding monitoring and salvage operation reporting will further inform the types of flow-release events that cause stranding events of sports fish that necessitate salvage.

This FSMP does not apply:

- In the event that permanent flow regimes are imposed upon Genesis for affected waterways within the New Consents as defined in clause 6.1 of the Agreement, Fish and Game and Genesis will meet to determine if any form of varied FSMP is required, and if so, will develop it in a timely manner;
- To the extent it is inconsistent with Genesis' compliance with its consent condition requirements (including but not limited to recreational releases) and operation of the Tekapo Power Scheme within statutory and regulatory requirements, but the FSMP will reapply as soon as reasonably practicable after such requirements and Genesis will promptly notify Fish and Game of such requirements occurring.

- In the event of mechanical or system failures; unforeseen maintenance, repairs or upgrades, flood events/management and/or any operational or management response to protect human health and safety or prevent damage to structures, but the FSMP will reapply as soon as reasonably practicable after such events and Genesis will promptly notify Fish and Game of such events occurring.

Genesis will engage in consultation with CSIFGC a suitably experienced person(s) (the **Salvage Contractor(s)**) to undertake salvage required by the FSMP. If CSIFGC is the Salvage Contractor, the costs for its work are set out in **Schedule 3**. At its discretion and cost CSIFGC may take part in any sports fish salvage operation under this FSMP but shall not hinder the Salvage Contractor for delivering the requirements of Genesis' consent conditions.

Salvage details

1. **Extended Flow Event**
   1.1. Extended Flow Events are defined as any single or multiple flow releases having:
      (a) Flows of 13 m^3/s* or greater released from Gate 16 on 40 or more days of any 60-day period; or
      (b) Overall average daily flow released from Gate 16 exceeds 50 m^3/s for any continuous 25-day period; or
      (c) Spill flows occur over the George Scott weir exceeding 15 days in any 30-day period.

      *As measured by the half-hourly compliance flow in the Genesis Hilltop Hydrology system.

   1.2. Genesis is not required to notify CSIFGC and the Salvage Contractor of any flow event that either will not or is not anticipated to meet the definition of an Extended Flow Event under clause 1.1.

   1.3 Genesis will notify CSIFGC and the Salvage Contractor:
   a) at commencement of any flow events anticipated to qualify as an Extended Flow Event as defined in clause 1.1, and of the expected duration of the flow event.
   b) Within 2 days, that a flow event has qualified as an Extended Flow Event, and the expected remaining duration of the flow event.
   c) Of the cessation of an Extended Flow Event within 12 hours.
   d) In October each year or on request of CSIFGC of the scheduled recreational flow releases for the coming season.

1.4. Genesis will use reasonable endeavours to notify CSIFGC and the Salvage Contractor:

      (a) The date and time of predicted Extended Flow cessation (where practicable), including as relevant 5 days in advance and again between 1 to 2 days before cessation.**
      (b) Any predicted temporary cessation** of an Extended Flow Event whereby the cessation will be of a duration exceeding 48 hours.

      **Cessation is often not known in advance and commissioning of plant often requires intermittent and changing flow.

   1.5. If an Extended Flow Event ceases and a further Extended Flow Event is expected within 30 days, the parties will consult to determine the best times to isolate Gate 16 to enable sports

fish salvage and review in good faith the management of top-up flows to determine if these can be operated during the interim period to minimise ongoing stranding, taking into account Genesis' operational requirements.

2. **Significant Stranding**

For avoidance of doubt, Significant Stranding is a measure of sports fish numbers and is independent of the defined Extended Flow Event under clause 1.1.

2.1. A Significant Stranding occurs when:

(a) a recorded observation by CSIFGC or Genesis staff on regular inspection duties after an Extended Flow Event identifies the number of sports fish at one or more of the locations in clause 2.2 as being at or above the numbers set out in **Schedule 1**; and

(b) CSIFGC or Genesis notify the other party in writing of the recorded Significant Stranding and its location(s).

2.2. The locations where a Significant Stranding in clause 2.1 may be identified, and responded to, are (Refer to **Schedule 2** map):

(a) Gate 16 stilling basin.

(b) Upper Takapō River, Area 1 to Canoe Course.

(c) George Scott weir stilling basin.

(d) Lower Takapō River, Area 6.

2.3. To avoid doubt, the trigger numbers in clause 2.1 apply independently to each named location. Triggering salvage in one area does not necessitate a salvage response in another (or all) areas. For example, a trigger in Area 1 to Canoe Course and providing for salvage in that area does not necessitate the pump down of the Gate 16 stilling basin unless that trigger number in clause 2.1 is also met or exceeded.

3. **Pump down at the Gate 16 stilling basin and/or George Scott weir stilling basin**

3.1. Following:

(a) an Extended Flow Event as defined in clause 1.1 and using reasonable endeavours before Lake George Scott top-up flows recommence, or

(b) on notification of a Significant Stranding as defined in clause 2.1 at the Gate 16 stilling basin and/or George Scott weir stilling basin:

Genesis will confirm the date for pump down with the Salvage Contractor and notify the contractor of the date and time that Gate 16 will be isolated for safety and when riverbed salvage can commence. Following that:

(c) Subject to clause 3.1 Genesis will:

i. undertake any pump down within 10 working days of cessation of an Extended Flow Event or notification under clause 2.1 (unless otherwise agreed with CSIFGC); and

ii. pump down Gate 16 stilling basin and/or George Scott weir stilling basin to facilitate Salvage Contractor access;

iii. ensure the pump intake has a porous screen with open spaces no greater than 20mm to prevent sports fish entering the pump.

(d) The Salvage Contractor will complete salvage following pump down and notify Genesis in accordance with clause 8.2 – clause 8.4 and will also let the Genesis Tekapo contact

know when salvage is complete (where any salvage overlaps with salvage under clause 4.1 the Salvage Contractor will use reasonable endeavours to undertake a combined salvage operation for clause 3.1 and clause 4.1 within 24 hours);

(e) From the time Gate 16 stilling basin is pumped down to an agreed level appropriate to successfully facilitate electric fishing, isolate Gate 16 for up to 24 hours to enable salvage. If time beyond this is requested by the Salvage Contractor, Genesis will consider further isolation pending operational, health and safety, or consent requirements;

(f) Gate 16 will only be isolated and Lake George Scott top up flows disabled for a maximum of 5 days at a time;

(g) The Salvage Contractor will use reasonable endeavours to complete riverbed salvage prior to Gate 16 stilling basin salvage to enable Gate 16 isolation time to be minimised; and

(h) The Salvage Contractor will report in writing the outcome of salvage to Genesis and CSIFGC, including number of live, dead, and remaining sports fish within 20 working days of completing salvage.

4. **Sports fish salvage at Upper Takapō River, Area 1 to Canoe Course and Lower Takapō River, Area 6**

4.1. Following an Extended Flow Event under clause 1.1 or notification of a Significant Stranding under clause 2.1 for any salvage in the Upper Takapō River, Area 1 to Canoe Course or the Lower Tekapō River, Area 6:

(a) Genesis will confirm the date and time for salvage in consultation with CSIFGC and the Salvage Contractor. For Area 1 to Canoe Course the salvage shall align with 3.1(g) should a pump down and salvage of Gate 16 stilling basin and/or George Scott weir stilling basin also be occurring;

(b) Where any salvage overlaps with salvage required under clause 3.1 the Salvage Contractor will use reasonable endeavours to undertake a combined salvage operation under clause 3.1 and 4.1 within 24 hours from the time the Gate 16 stilling basin is pumped down to the agreed level;

(c) For salvage within Area 1 to Canoe Course, Gate 16 must be isolated and the provisions in clause 3.1(f) to (g) shall apply as relevant;

(d) if an agreed time for sports fish salvage in Area 1 to Canoe Course is not attended by the Salvage Contractor, future isolation of Gate 16 is not required for the same event unless safety and operational requirements can be met;

(e) The Salvage Contractor will adhere to all requirements outlined in accordance with clause 8.1 – 8.4 (Safety) and will also notify Genesis immediately upon completion of salvage; and

(f) The Salvage Contractor will report in writing the outcome of salvage to Genesis and CSIFGC, including number of live, dead, and remaining sports fish within 20 working days of completing salvage.

5. **Sports fish salvage at Upper Takapō River, Area 1 to Canoe Course and Lower Takapō River, Area 6 to be completed by Genesis subject to Clause 5.**

5.1. Following an Extended Flow Event under clause 1.1 or notification of a Significant Stranding under clause 2.1 for any salvage in the Upper Takapō River, Area 1 to Canoe Course or the

Lower Takapō River, Area 6, subject to clause 5, Genesis will engage the Salvage Contractor to complete salvage as follows

(a) In accordance with clause 3.1(c), Genesis will revise and advise the date and time for salvage in consultation with the Salvage Contractor.

(b) Genesis will notify CSIFGC.

(c) The Salvage Contractor will report in writing the outcome of salvage to Genesis and CSIFG, including number of live, dead, and remaining sports fish within 20 working days of completing salvage.

6. Stranding events at the Tekapo A draft tube and the Tekapo Canal

6.1. Subject to any dewatering (pump-out) of the Tekapo A Power Station draft tube, salvage will occur as follows:

(a) Genesis to notify CSIFGC and the Salvage Contractor at least two working days before commencement of pump-out.

(b) Genesis will engage the Salvage Contractor to salvage sports fish and relocate to the Tekapo Canal subject to the method of fish salvage to be developed by Genesis in consultation with CSIFGC.

(c) The Salvage Contractor will report the outcome of salvage, including number of live, dead, and remaining sports fish to Genesis and CSIFGC within 20 working days of completing.

(d) CSIFGC in consultation with Genesis may request presence of CSIFGC staff to collect information to assist with fishery management, e.g. fish species, size and tag recapture information but shall not hinder the Salvage Contractor for delivering the salvage requirements. This would be at no cost to Genesis.

6.2. Any dewatering of the Tekapo Canal requires:

(a) Genesis to provide a canal salvage management plan to CSIFGC for comment 2 weeks ahead of commencing salvage.

(b) Any comments made by CSIFGC on the canal salvage management plan shall be considered by Genesis, and if not accepted, reasons shall be provided and further consultation with CSIFGC will take place.

(c) The Salvage Contractor will complete salvage in accordance with the canal salvage management plan.

(d) The Salvage Contractor will report the outcome of salvage, including number of live, dead, and remaining sports fish, and other fish statistics to Genesis and CSIFGC, within 20 working days of completing salvage.

7. Relocation

Any sports fish that are salvaged shall not be relocated to any areas where there are projects or measures are in place to exclude sports fish from habitat.

8. Safety

8.1. The Salvage Contractor and CSIFGC (if CSIFGC staff decides to attend a salvage) and any volunteers will adhere to all safety instructions given by Genesis staff. The Salvage Contractor will maintain current First Aid certificates and complete the required Genesis online induction 'Working around Power Schemes' (or any subsequent requirement).

CSIFGC staff and volunteers will only attend if they have completed a safety induction by Genesis staff or the Salvage Contractor prior to salvage.

8.2. At any time when Gate 16 is not isolated, Salvage Contractor and CSIFGC staff and volunteers if they attend, will call into the Genesis Control Room on 07 384 7210 (or at the number notified by Genesis to the Salvage Contractor from time to time) to advise of their expected presence within the riverbed.

8.3. At any time when Gate 16 is isolated for sports fish salvage, a four-hour recall time will be placed on the gate in the event the operational needs determine that flow is required through Gate 16. This will require all personnel and equipment to be removed from the riverbed within four hours of notification using the phone number in clause 8.2.

8.4. The Salvage Contractor and CSIFGC staff and volunteers if they attend, must notify Genesis through the phone number in clause 8.2 prior to entering and after exiting the Takapō River for salvage or stranding observations, to ensure gate isolation for health and safety reasons.

9. **Construction**

(a) Any counts toward the defined Extended Flow Event under clause 1.1 will be reset upon completion of sports fish salvage.

(b) This FSMP shall be read in light of the Agreement and the provisions set out in the Agreement take precedence over this FSMP in the event of any inconsistency.

10. **Communications**

The preferred method of communication between Genesis and CSIFG is via voice to voice and/or e-mail correspondence. To avoid doubt clause 8.2 provides a specific number that must be used for specified communications as set out in this FSMP.

11. **Review**

This FSMP shall be reviewed by Genesis and CSIFG every 5 years or more frequently by agreement, to review the effectiveness of the FSMP in achieving its purpose (as per clause 3.1 of the Agreement).

Genesis Energy Limited by:

Name: Tracey Hickman

Title: Chief Wholesale Officer

Central South Island Fish and Game Council by:

Name: Steve McKnight

Title: Chief Executive Officer

References

Adams R. (2021) Salvage and Monitoring of Sport Fish Strandings in the Tekapo Power Scheme 2013 – 2021. *Central South Island Fish and Game Council report*. 31p.

SCHEDULE 1 - Visual observation criteria

A significant stranding event will be observed and notified for Gate 16 stilling basin when at least:

- 90 fish are observed in 'very good' observability.
- 80 fish are observed in 'good' observability.
- 60 fish are observed in 'poor' observability.
- 40 fish are observed in 'very poor' observability.

A significant stranding event will be observed and notified for George Scott weir stilling basin when at least:

- 25 fish are observed in 'good' or 'very good' observability.
- 20 fish are observed in 'poor' or 'very poor' observability.

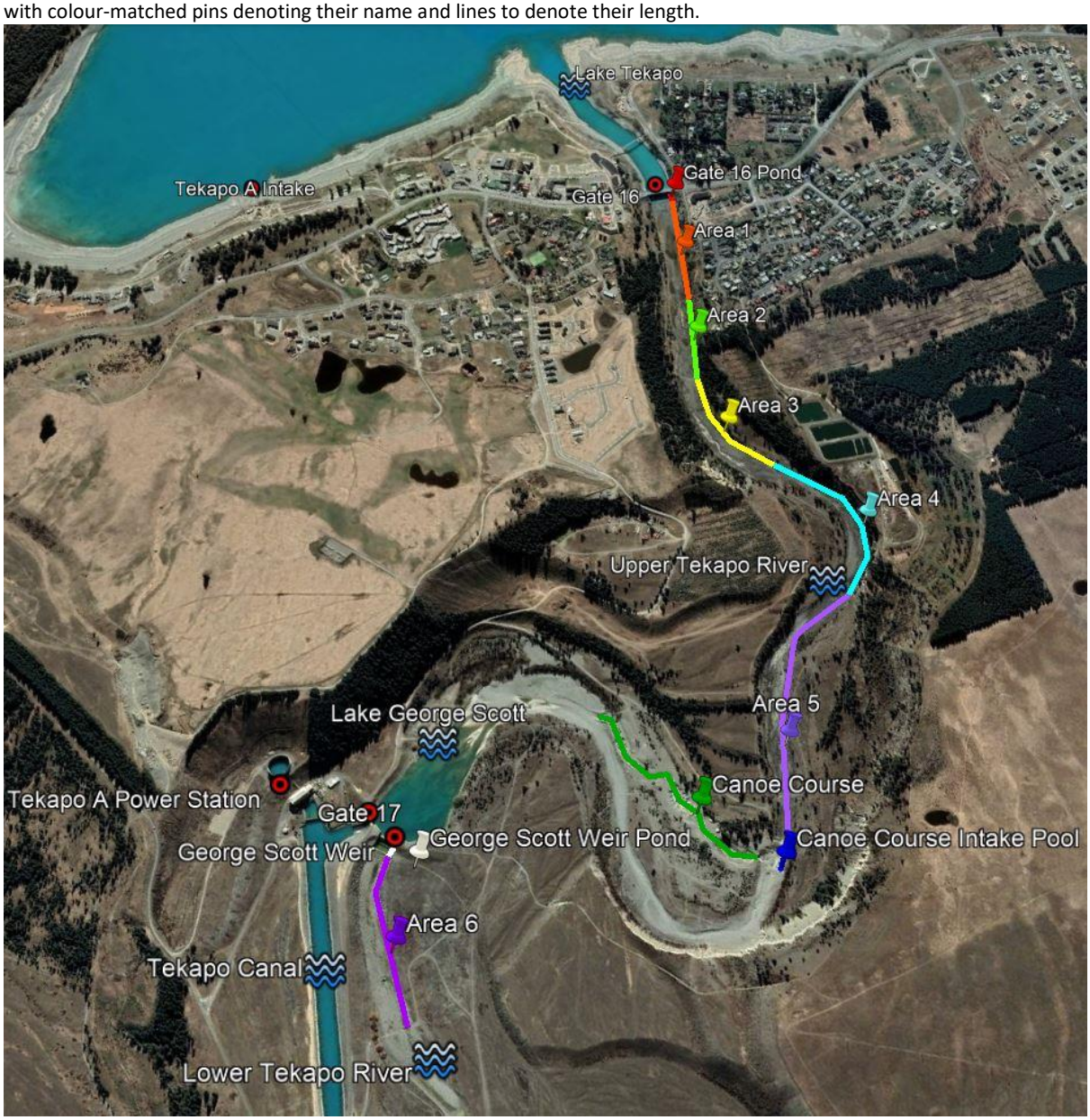
Observability of Gate 16 stilling basin and George Scott weir stilling basin is defined as:

- Very good – the bottom of the stilling basin is clearly visible.
- Good – can view most of the area but cannot see the bottom.
- Poor – affected by silt but still some visibility to about half stilling basin depth.
- Very Poor – highly effected by silt and visibility possible to a depth of about 30cm or less.

A significant stranding event will be observed and notified when at least:

- 50 fish are observed in the Upper Takapō River, Area 1 to Canoe Course; or
- 30 fish are observed in the Lower Takapō River, Area 6 when at least 30 fish are observed.

SCHEDULE 2 – A Google Earth image of the Tekapo Power Scheme with named features denoted. Waterways are marked with wave icons, scheme infrastructure is marked with red dots, and named monitoring sites and areas are marked with colour-matched pins denoting their name and lines to denote their length.



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