

Our Reference: A1793479

Consent No: 2001.386.V5

WATER PERMIT

Pursuant to the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Contact Energy Limited

Address: Level 2, Harbour City Tower, 29 Brandon Street, Wellington

to dam (crest level of 133.51 metres above datum) the Clutha River at Roxburgh

for the purpose of hydro-electric power generation

for a term expiring: 25 May 2042

Location of activity: Upstream of Roxburgh Hydro Village

Legal description: Lot 1 DP 25198

Map reference: Centred on NZMS 260 G43:225-194

Conditions:

1. Survey Datum

All levels specified in this consent and all monitoring of levels required by this consent shall be in terms of mean sea level (Dunedin datum).

2. Compliance with Other Relevant Resource Consents

This consent shall be exercised in conjunction with, and to ensure compliance with, the following consents:

Hawea Dam

No. 2001.383 – Water Permit to Dam

No. 2001.389 – Water Permit to Divert

No. 2001.392.V5 – Discharge Permit

No. 2001.395 – Discharge Permit

No. 2001.399 – Water Permit to Take & Use

Gladstone Gap Stop Bank

No. 2001.384 – Water Permit to Dam

Clyde Dam

No. 2001.385.V2 – Water Permit to Dam

No. 2001.387 – Water Permit to Divert

No. 2001.390 – Water Permit to Take & Use
No. 2001.393 – Discharge Permit
No. 2001.396 – Discharge Permit

Roxburgh Dam

No. 2001.388 – Water Permit to Divert
No. 2001.391 – Water Permit to Take & Use
No. 2001.394.V1 – Discharge Permit
No. 2001.397 – Discharge Permit
No. 2001.398.V1 – Land Use Consent

3. Catchment Approach to Monitoring

- a) The consent holder shall submit a monitoring programme to the Otago Regional Council within six months of the commencement of this consent and shall thereafter implement the same. The purpose of the programme shall be to monitor in an integrated manner, lake levels, river levels and flows required by the conditions of this consent, and to enable the consent holder to demonstrate compliance with the conditions of this consent.
- b) The programme will specify procedures for monitoring lake levels and river levels and flows required by the conditions of this consent. Monitoring sites are defined in the table in condition 8.
- c) The consent holder shall implement a maintenance programme to ensure the functionality and accuracy of the equipment monitoring flows and levels.

4. Annual Reporting

The consent holder shall supply the Otago Regional Council, Queenstown Lakes District Council, Central Otago District Council and Clutha District Council with an annual report by 30 June of each year. The annual report is to include:

- a) The results of all monitoring data collected in compliance with this consent for the period up to and including 31 December immediately preceding the annual report;
- b) An interpretation of all monitoring data in terms of resource consent compliance and non-compliance, including an assessment of any actual environmental effects which have arisen from the exercise of this consent.

5. Review

- a) The Otago Regional Council may, within three months of every fifth anniversary of the commencement of this consent, in accordance with section 128 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent to:
 - (i) deal with any adverse effect on the environment which may arise from the exercise of this consent; and or
 - (ii) review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource consent and if necessary require the consent holder to avoid, remedy or mitigate such effects by way of further or amended conditions; and or

- (iii) require the holder of this resource consent to adopt the best practicable option to remove or reduce adverse effects on the surrounding environment due to the exercise of this consent; and or
 - (iv) review the adequacy of and the necessity for monitoring undertaken by the consent holder;
- b) The consent holder shall immediately advise the Otago Regional Council in the event that there arises a potential split in ownership of the Hawea Dam, Clyde Dam and/or Roxburgh Dam. Pursuant to section 128 (1) of the Resource Management Act 1991 the Otago Regional Council may then initiate a review for the purpose of ensuring coordination of consents relating to the operation of those structures.
- c) The Otago Regional Council may, within three months of the first anniversary of the commencement of this consent, in accordance with section 128 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent to review the continued necessity for conditions governing dam safety in the light of enactment of a separate regulatory regime governing the safety of dams.
- d) Pursuant to section 127(1) of the Resource Management Act 1991 the consent holder may apply to the Otago Regional Council for a change to or cancellation of any of the conditions of this consent (other than a condition as to duration of the consent) at any time as allowed by law.

6. Flood Management Plan

- a) The consent holder shall, within six months of the commencement of this consent, prepare for approval by Otago Regional Council, a Flood Management Plan in consultation with Queenstown Lakes District Council, Central Otago District Council and Clutha District Council, identifying:
 - (i) Procedures the consent holder will implement to ensure continual preparedness for flood events;
 - (ii) Monitoring and control actions the consent holder will implement during the rising, cresting and falling limbs of floods;
 - (iii) Procedures the consent holder will implement for notification to interested parties of such actions; and
 - (iv) The manner in which the consent holder will control the storage and flow of water in the Clutha River/Mata-au catchment to mitigate the adverse effects of flooding to the extent that this is practicable through the exercise of this consent and the other consents listed in condition 2.
- b) Pending approval of the Flood Management Plan prepared under condition 6 (a) of this consent, the consent holder shall exercise this consent in accordance with the Clutha Flood Rules Version 1.
- c) Once the Flood Management Plan prepared under condition 6 (a) of this consent is approved, the consent holder shall exercise this consent in accordance with that management plan including approved revisions of the plan.
- d) The consent holder shall reassess the effectiveness and appropriateness of the Flood Management Plan prepared under condition 6 (a) of this consent

in consultation with Queenstown Lakes District Council, Central Otago District Council, Clutha District Council and Otago Regional Council no less frequently than every fifth anniversary of the commencement of this consent and also following any instantaneous flow in the Clutha River/Mata-au of greater than 2500 cubic metres per second as measured at Clyde (site 75213).

- e) If the reassessment undertaken pursuant to condition 6 (d) indicates to the consent holder that changes to the Flood Management Plan are necessary or desirable, the consent holder shall revise the Flood Management Plan accordingly, for approval by Otago Regional Council.

7. Dam and Landslide Safety Requirement

- a) The consent holder shall ensure that the Roxburgh Dam and all its appurtenant components and accessory structures are maintained in a safe and stable condition.
- b) Safety shall be managed in accordance with the principles of the Dam Safety Guidelines issued by the New Zealand Society on Large Dams.
- c) The consent holder shall provide a certificate confirming the safety of the Roxburgh Dam signed by an independent engineer registered under the Chartered Professional Engineers Act 2003, or the equivalent recognised international qualification, and approved by Otago Regional Council as having the relevant expertise for the purpose. The certificate shall be provided on each anniversary of the commencement of this consent or such alternative date agreed by the Otago Regional Council. The certificate provided to Otago Regional Council shall include advice as to works undertaken on the dam for the purposes of dam safety since the last certificate, and the rationale for such works.
- d) An independent safety assessment of the Roxburgh Dam shall be carried out at intervals of not more than five years, commencing from 2007 or such greater intervals as agreed by the Otago Regional Council.
- e) The results of the independent safety assessment shall be reported to the Otago Regional Council, and copies sent to the Central Otago and Clutha District Councils.
- f) In the event that an earthquake with an intensity of IX or greater on the Modified Mercalli scale, is experienced at the Roxburgh Dam, an inspection and accompanying independent audit shall be carried out as soon as practicable after the earthquake. A summary report detailing the results on the inspection shall be promptly provided to Otago Regional Council.
- g) Safety of the Roxburgh Gorge landslides shall be managed in accordance with the principles of the Dam Safety Guidelines issued by the New Zealand Society on Large Dams.
- h) The consent holder shall submit to the Otago Regional Council on or before 30 June of every second year from the date of commencement of the consent, a summary report of any changes and movement of each landslide referred to in the previous condition, and any stabilisation work undertaken since the previous report.
- i) An independent safety assessment of the landslides referred to in condition 7g) above shall be carried out at intervals of not more than five years.

- j) The results of every such independent safety assessment shall be reported to the Otago Regional Council, and copies sent to the Central Otago and the Clutha District Councils.
- k) In the event that an earthquake with an intensity of IX or greater on the Modified Mercalli scale, is experienced at any of the landslides referred to in condition 7g) above, an inspection and accompanying independent audit shall be carried out as soon as practicable after the earthquake. A summary report of any changes in movement of affected landslides since the last summary report prepared under condition 7 (h) above shall be promptly provided to Otago Regional Council.

8. Water Level and Flow Recording

- a) The consent holder shall maintain water level recordings and flow ratings as specified below. All data shall be made available to the Otago Regional Council, on request. All data is to be recorded at not more than 15 minute intervals.

| Site Number | Site Name | Grid Reference NZMS 260: | Level Data, or Flow Rating Data required |
|-------------|-------------------------------------|--------------------------|--|
| 75288 | Hawea Dam | G40:125-153 | Level Data |
| 75287 | Hawea River at Camphill Bridge | G40:124-107 | Level Data and Flow Rating |
| 75282 | Clutha River at Cardrona Confluence | F40:088-066 | Level Data and Flow Rating |
| 75277 | Lake Wakatipu at Willow Place | F41:733-668 | Level Data |
| 75263 | Kawarau at Frankton | F41:740-667 | Level Data |
| 75292 | Lake Wanaka at Roys Bay | F40:037-058 | Level Data |
| 75262 | Kawarau at Chards Road | F41:844-698 | Level Data and Flow Rating |
| 75276 | Shotover at Bowens Peak | F41:722-710 | Level Data and Flow Rating |
| 75265 | Nevis at Wentworth | F41:974-639 | Level Data and Flow Rating |
| 75268 | Lake Dunstan at Ripponvale | F41:048-662 | Level Data |
| | Lake Dunstan at Clyde Dam | | Level Data |
| 75213 | Clutha River at Clyde | G42:212-502 | Level Data and Flow Rating |
| 75253 | Manuherikia at Ophir | G41:418-608 | Level Data and Flow Rating |
| 75228 | Clutha at Alexandra | G42:266-438 | Level Data |
| | Roxburgh Dam* | | Level Data |
| 75220 | Clutha River at Roxburgh | G43:223-190 | Level Data and Flow Rating |

* The Roxburgh Dam site is to record lake levels beyond the combined drawdown zone of the dams' gates, sluices and penstocks.

- b) In addition to the requirements of condition 8 (a) above, the consent holder shall provide to the Otago Regional Council, upon request, the times and rates of individual discharges of the penstocks, the spillways or the sluices of the Roxburgh Dam.
- c) The consent holder shall implement a maintenance programme to ensure the functionality and accuracy of the equipment monitoring flows and levels.

9. Lake Levels

- a) The normal maximum operating level of Lake Roxburgh shall not exceed 132.6 m above datum (based on a 3 hour rolling average), as measured at the Roxburgh Dam site, except when a higher lake level is required either by the Clutha Flood Rules Version 1 (if still operative) or in order to implement the Flood Management Plan.
- b) The normal minimum operating level of Lake Roxburgh shall not decrease below 130.15 m above datum (based on a 3 hour rolling average), as measured at the Roxburgh Dam site, at any time except as required to meet dam safety and d) or e) below.
- c) Under flood flow conditions, the level of Lake Roxburgh will be managed in accordance with the Clutha Flood Rules Version 1 (if still operative) or the Flood Management Plan.
- d) When inflows into Lake Roxburgh are anticipated to rise, such that within 48 hours they are likely to exceed 850 cumecs, the lake level may be reduced to a minimum of 125.75 m above datum, as measured at the Roxburgh Dam site, provided that:
 - (i) No flood surges (or transient flow peaks) are caused; and
 - (ii) No flood detentions (or transient flow deficits) are caused.A lake level of 125.75 m above datum, can only be accessed in accordance with the procedures outlined in the Clutha Flood Rules Version 1 (if still operative) or the Flood Management Plan.
- e) Except as providing for d) above and maintaining dam safety, the lake level may be reduced to a minimum of 129.00 m above datum (based on a 3 hour rolling average), as measured at the Roxburgh Dam site, and when Land Use Consent RM11.158.01 is being exercised provided that:
 - (i) No flood surges (or transient flow peaks) are caused;
 - (ii) No flood detentions (or transient flow deficits) are caused;
 - (iii) The lake level reduction does not occur on Saturdays, Sundays or Public Holidays;
 - (iv) The number of days that the lake level is below that specified in b) above, does not exceed 60 days.
 - (v) Boats are able to be launched at the Alexandra Boat Ramp.
- f) Except as providing for c) and d) above and maintaining dam safety, the lake level may be reduced to a minimum of 129.0 m above datum (based on a 3 hour rolling average), as measured at the Roxburgh Dam site, and when Land Use Consent 2001.398 is being exercised between Manuherikia River cross sections M1-M3 provided that:

- i) No flood surges (or transient peaks) are caused;
- ii) No flood retentions (or transient flow deficits) are caused;
- iii) The lake level reduction does not occur after sunrise, or before sunset on Saturdays, Sundays or Public Holidays;
- iv) The number of days that the lake level is below that specified in b) above, does not exceed 40 days in any calendar year; and
- v) Boats are able to be launched at the Alexandra Boat Ramp

10. Lakebed Monitoring

- a) The consent holder shall survey the Lake Roxburgh cross sections identified in the Opus (July 2000) report on Drawing No. 8/1247/86/8804/3 (copy attached) and the Lower Manuherikia River bed at sections M1-M13 inclusive (as identified on the topographical map attached) at the following frequency:
 - at intervals of not more than five years for Lake Roxburgh; and
 - at intervals of not more than two years for the Lower Manuherikia River; except that
 - in the Lower Manuherikia River, a survey shall occur within 3 months of a flow exceeding 350 cumecs as measured at the Ophir site (Site No. 75253); and except that
 - in both Lake Roxburgh and the Lower Manuherikia River, a survey must occur within 3 months of inflows into Lake Roxburgh exceeding 1750 cumecs (as measured at Clutha River at Clyde and Manuherikia at Ophir).

The first survey of all above areas shall be undertaken within 6 months of the commencement of this consent.

- b) The results of each survey shall be provided to the Otago Regional Council within 3 months of completion of each survey. The reported survey results shall include an assessment of any predicted flood levels for Lake Roxburgh as measured at each re-survey cross-section based on a 3600 cumecs outflow at Roxburgh Dam.
- c) The consent holder shall prepare and update, on an annual basis, a plot of the water level of the Clutha River at Alexandra versus Lake Roxburgh inflows (stage/discharge rating) for inflows greater than 850 cumecs. An interpretation of the data and comment on any change in the flood hazard of Alexandra shall also be supplied. The plot and interpretation shall be included in the Annual Report required by Condition 4 of this consent.

11. Flood Hazard Maps for Alexandra

- a) Within nine months of the commencement of this consent the consent holder shall lodge with Otago Regional Council for approval flood hazard maps covering Alexandra and its environs for the following real and hypothetical events:
 - (i) The peak level reached during the November 1999 flood;

- (ii) An hypothetical instantaneous water flow of 3,850 cubic metres per second entering Lake Roxburgh (approximately 1:100 Annual Exceedance Probability);
 - (iii) An hypothetical instantaneous water flow of 4,900 cubic metres per second entering Lake Roxburgh (approximately 1:500 Annual Exceedance Probability);
 - (iv) An hypothetical instantaneous water flow of 7,000 cubic metres per second entering Lake Roxburgh (approximately the Probable Maximum Flood);
- b) The flood hazard maps shall contain a prominent note that changes in the Annual Exceedance Probability at various flood levels will occur over time.
 - c) The consent holder shall revise the flood hazard maps prepared pursuant to condition 11 (a) of this consent, for approval by Otago Regional Council, as soon as practicable after any lake or riverbed survey undertaken in accordance with condition 10 of this consent.

12. Alexandra Flood Compensation

- a) Subject to subcondition b), this condition shall apply to any damage caused by, or contributed to by, the exercise of this consent and attributed to inundation of land adjoining the Clutha River / Lake Roxburgh between Roxburgh Dam and Clyde Dam (including its tributaries to the extent they may be affected by water backing up behind the Roxburgh Dam). For the avoidance of doubt, this condition is intended to address flooding which is exacerbated by the existence of the lake and/or the presence of sediment on the bed of the Clutha River and/ or Lake Roxburgh between the Clyde Dam and the Roxburgh Dam.
- b) This condition shall not apply in the case of:
 - (i) easements, deeds or agreements (in the case of residential dwellings the existence of which is noted on certificates of title) either specifically permitting the consent holder to inundate the property in question or specifically excluding the consent holder from liability to compensate for loss or damage arising from inundation of the property; or
 - (ii) any new structures that, on or after the date of approval of the Flood Hazard Map prepared pursuant to condition 11 a) (ii) of this consent, are constructed or placed on land identified on that map as subject to flooding in the event of a flood of 3850 cubic metres per second entering Lake Roxburgh. For the purpose of this subcondition, the replacement or upgrading of an existing structure is not a new structure, provided the replacement or upgraded structure serves the same purpose as the existing structure.

Residential Dwellings

- c) In the case of any residential dwelling entered by floodwaters the consent holder will offer to pay:
 - (i) the owner of the dwelling either the actual and reasonable costs of the cleanup of the dwelling and of repairing or replacing (if a suitably qualified assessor certifies that is necessary) all fixtures and fittings

- damaged by a flood (up to replacement cost); or reasonable replacement costs if the residential dwelling is destroyed;
- (ii) the occupier of the dwelling the actual and reasonable costs of repairing or replacing (if a suitably qualified assessor certifies that is necessary) any chattels damaged by a flood (up to replacement cost);
 - (iii) the owner of the dwelling any rentals not received as a result of the flooding for as long as the premises are not fit for occupation, provided that the owner takes all reasonable steps to restore the premises to a condition fit for occupation as soon as practicable;
 - (iv) the occupier of the dwelling:
 - 1) either the actual and reasonable costs of alternative accommodation while the flood waters recede, repairs are carried out and the house is made habitable; or
 - 2) an allowance of \$50 per person displaced per day as extra living costs if they stay with family, friends, or willing strangers;
- d) (i) In circumstances where any residential dwelling – excluding any chattels, fixtures or fittings detached from the building or part of the building in which people live – is flooded, the consent holder will offer to pay \$4,000 per residential dwelling solatium payment to the occupier or occupiers (as applicable) for distress and inconvenience.
- (ii) In circumstances where no monies are payable under condition 12 d)(i) but the occupants of any residential dwelling are directed to vacate the premises by Civil Defence authorities by reason of actual or potential flooding, the consent holder shall offer to pay to the occupier or occupiers (as applicable) either the actual and reasonable costs of alternative accommodation for so long as they are unable to return to their dwelling or an allowance of \$50 per person displaced per day as extra living costs if they stay with family, friends, or willing strangers, and \$500 per residential dwelling solatium payment for distress and inconvenience.
- e) For the purposes of condition 12(c) and (d) ‘residential dwelling’ includes:
- a building or a part of a building in which people live;
 - any external heat pump or air conditioning unit(s) used to heat or cool that building/part of building as applicable;
 - domestic outbuildings, greenhouses and garages;
 - permanent decks and built in furniture;
 - aerials forming part of the building;
 - letter boxes, exterior blinds and awnings, fixed clotheslines and built in barbecues;
 - septic tanks, oil heating tanks, service tanks and water tanks including their fixed pumps;
 - permanent spa or inground swimming pools, including their fixtures, pipes and fixed pumps;
 - walls, fences, gates;
 - gas pipes, fresh-water pipes, electricity and telephone cables;
 - driveways, paths, footpaths and tennis courts;
 - retaining walls;
 - planted hedges, shrubs, lawns and plants.

Commercial Premises

- f) The consent holder shall offer to pay to each occupier or owner (as appropriate) whose commercial premises are entered by floodwaters or who are directed to vacate the premises by Civil Defence authorities by reason of actual or potential flooding:
- (i) In the case of an owner of commercial premises receiving rentals which are not paid by reason of flooding, all rentals that would otherwise have been paid for as long as the premises are not fit for occupation by the businesses that were carried on immediately prior to inundation or until the premises are replaced whichever is first;
 - (ii) In the case of an owner carrying on their own business within their premises, or whose commercial premises are untenanted at the time of the flood, 8% per annum of the capital value for the period commencing when the premises are entered by floodwaters or vacated at the direction of Civil Defence authorities (as applicable), until it is repaired, and made capable of being fully occupied. In this condition “capital value” means the value of the premises on the day before flooding commences or are vacated (as established by a suitably qualified valuer);
 - (iii) It is a condition of ongoing payment pursuant to conditions 12f)(i) or (ii) that the owner must take all reasonable steps to restore the premises to a condition fit for the purpose for which it was being tenanted prior to flooding as soon as practicable;
 - (iv) Where an occupier is obliged to pay rent but is unable to occupy the premises for the purpose of carrying on the business by reason of flooding, any occupier for such rentals until such time as the premises are fit for occupation by the businesses that were carried on immediately prior to flooding provided that it is a condition of ongoing payment pursuant to this condition that the occupier must take all reasonable steps to restore the business to its previous status;
 - (v) In addition to the foregoing rental payments the consent holder shall also offer to pay:
 - a. the cost of replacement of all damaged or destroyed stock (provided that the consent holder has the right to the stock so replaced);
 - b. the actual and reasonable costs of repair or replacement of damaged plant and equipment (provided that the consent holder has the right to any plant or equipment replaced);
 - c. full replacement costs to the building owner if any building is destroyed;
 - d. all ordinary wages and other emoluments that have been paid while the business is not operating;
 - e. all other unavoidable costs that have been paid while the business is not operating;
 - f. \$1,000 solatium payment for distress and inconvenience to the business owner; and
 - g. to the extent not falling within a category of loss or damage covered by any part of this condition 12f), costs of business

interruption, provided that any claims for such costs shall be reduced by any proceeds from insurance claims for business interruption, and shall be supported by a reasonable assessment prepared in accordance with standard accounting practice by a Chartered Accountant;

Home Business

- g) Where a business operates from the owner's residential dwelling, the total of the claims made under conditions 12c), 12d), 12e) and 12f) shall not exceed that person's actual losses.

Other Property

- h) In the event that property not covered by conditions 12c), 12d), 12e) or 12f) is damaged as a result of inundation, then:
- (i) consent holder will offer to meet the actual and reasonable repair or replacement costs incurred by the property owner; and
 - (ii) without affecting the generality of (i), damage to infrastructure like roads, telephones and power lines, stormwater and wastewater systems is included in the definition of 'property'.

Claims - General

- i) Any claim shall be made in writing to the consent holder within 12 months of the flooding giving rise to it supported by evidence of costs incurred (if applicable).
- j) Except for those claims (or parts thereof) in dispute, the consent holder shall make all payments prescribed in the above conditions, as soon as practically possible – and usually within three months maximum – after such undisputed claims are lodged.
- k) Any person who submits a claim shall do so on the basis that that person agrees:
- (i) to provide access to affected properties;
 - (ii) agrees to submit to arbitration if arbitration is invoked pursuant to condition 12 n); and
 - (iii) to provide such reasonable information that the consent holder, and or the Panel constituted under condition 12 m) may require.

Claims – Disputes Procedures

- l) In the event of any dispute about the amount of compensation payable by the consent holder to any person entitled to make a claim pursuant to this condition, the following conditions shall apply:
- (i) The consent holder shall notify the claimant as to what part or parts of the claim are disputed;
 - (i) If the part or parts of the claim in dispute are for a total sum less than \$500,000, the dispute shall be settled on the basis set out in condition 12j)(iii) (unless the claimant elects that the alternative procedure specified in Condition 12j)(xi) shall be followed).

Short Form Resolution Process

- m) The short form resolution procedure is as follows:
- (i) One Chartered Accountant and one suitably qualified valuer (“the Panel” who shall have the power to take expert advice as necessary) shall determine all disputed claims raised between any claimants and the consent holder not falling for determination under the Alternative Resolution Process in respect of each flood affecting property; .
 - (ii) The Panel shall be appointed either:
 - 1) by the Mayor of the Central Otago District Council and the consent holder by agreement; or
 - 2) failing such agreement by the President for the time being of the New Zealand Institute of Chartered Accountants in the case of selecting a Chartered Accountant and the President of the New Zealand Institute of Property Valuers in the case of selecting a valuer, from a choice of six chartered accountants and six valuers – three nominated by the Mayor of the Central Otago District Council as representative of the community, and three by the consent holder;
 - (iii) The Panel’s costs shall be paid by the consent holder;
 - (iv) The Panel shall receive such evidence from the claimant and the consent holder as those Parties choose to provide, and make such other enquiries as it considers appropriate;
 - (v) The Panel shall not make any reduction in the value of any claim (or the amount of any approved claim) for alleged betterment in respect of replacement goods or chattels;
 - (vi) The Panel is not required to conduct a formal hearing, but access to private property will be given to the Panel if it wishes to inspect any house, building or its contents (provided adequate prior notice is given);
 - (vii) All other procedures are to be agreed by the claimant and the consent holder or failing agreement a fair procedure will be fixed by the Panel;
 - (viii) The Panel shall act as an expert (not an arbitrator);
 - (ix) By giving notice of dispute, the consent holder is deemed to enter into a contract with the claimant to participate in the short form resolution process (unless the claimant has elected to the alternative procedures specified in condition 12j). The short form resolution process shall determine the amount (if any) and the consent holder’s contractual obligation to the claimant. The consent holder shall make any payment owing to the claimant forthwith upon the decision of the Panel being communicated to it;

Alternative Resolution Process

- n) Where the amount of the disputed claim for any one residential dwelling or commercial premises exceeds \$500,000 or the claimant has elected to pursue this alternative procedure, the provisions of the Arbitration Act 1996 shall apply.

General Provisions– Claims

- o) The consent holder shall make available to any person who believes on reasonable grounds that they have a claim for compensation under this condition 12 the services of a qualified Loss Adjuster to assist that person to formulate his or her claim. The Loss Adjuster's services shall be provided on the basis that he or she acts jointly for the potential claimant and for the consent holder, and reports to both.
- p) Any person who makes a claim for compensation pursuant to this condition shall make such a claim on the basis that they agree they will be bound by the outcome of that process, that any payments they receive will be in full and final satisfaction for all claims which they might have made in respect of the inundation and that they will not issue any proceedings in any jurisdiction subsequently seeking to claim compensation for damage or loss caused by the inundation.

(Advice note – before making any claim pursuant to this condition it would be prudent for the potential claimant to take advice and in particular to consider their insurance position.)

- q) In each case where a monetary figure is specified in dollars in this condition 12, for the purposes of implementation of the relevant part of condition 12, the figure shall be deemed to be adjusted by reference to increases in the Consumer Price Index from a base of the date of commencement of this consent to the date flooding of the property in question commences or the date the property is vacated in accordance with the directions of Civil Defence authorities (as applicable).
- r) All payments made by the consent holder pursuant to this condition shall be gross payments including GST where applicable, Provided that in the case where the claimant is GST registered, the claim must be supported by a GST invoice.

13. Safety Warnings

- a) The consent holder shall provide and maintain adequate signage in good repair in the vicinity of the Roxburgh Dam where the public can gain access, to warn the public of hazards associated with the operation of the structure and its appurtenant components.
- b) The consent holder shall maintain a boom on the lake surface, generally 50 metres upstream of the dam, to warn lake users of the hazards at the dam face (particularly with spillways). The boom shall be secured firmly to the shore or lakebed, shall not interfere with public use of the existing boat ramp in that vicinity, and shall be maintained in good repair, in safe condition and substantially clear of debris.

14. Safety Signage

- a) The consent holder shall, in consultation with the Central Otago and Clutha District Councils, prepare and submit to the Otago Regional Council for approval a signage plan within 6 months of the commencement of this consent.
- b) The signage plan is to provide for adequate signage to warn of the risk to public safety of operational changes in river flows along the Clutha River below the Roxburgh Dam.
- c) The signage plan shall identify the sites and the form and content of the signs used by the consent holder.
- d) The consent holder shall provide and maintain signage in good repair in accordance with the signage plan including approved revisions of that plan.
- e) The signage plan shall be reassessed by the consent holder and re-submitted to the Otago Regional Council for approval every three years after approval of the first signage plan prepared under condition 14(a) of this consent.

15. Archaeological Sites

- a) The consent holder, in consultation with the New Zealand Historic Places Trust (The Trust) and using The Trust's statutory rights to access land if required, shall carry out a baseline survey of archaeological sites within that part of the river and lake beds, lakeshores and riparian margins potentially affected by the activities permitted by the consents. The purpose of the baseline survey shall be to record the location, nature and condition of archaeological sites and to identify any risks to their integrity. Recording shall be undertaken according to best archaeological practice and shall establish specific measures that will allow effective ongoing monitoring of site condition. The baseline survey shall be commenced no later than six months following the commencement of this consent, and completed no more than two years later.
- b) The consent holder, in consultation with the Trust, shall develop a Management Plan for archaeological sites that may be adversely affected by the consent holder's operations as identified in the baseline survey. The Management Plan shall adopt a conservation and management approach consistent with best archaeological practice. It shall include management principles for at-risk sites, criteria for determining management actions, specific implementation measures, and a monitoring regime. The Plan will also assess the significance and degree of risk of at-risk sites. The Plan shall be completed no later than 3 years following commencement of this consent. A copy of the Management Plan shall be lodged with the Otago Regional Council.
- c) The consent holder shall implement the Management Plan and shall contribute to the cost of recording or protection works or other measures that may be required in proportion to the extent to which its activities affect at-risk sites. Work shall be prioritised according to the degree of risk and the significance of the site.
- d) Monitoring of sites in accordance with the Management Plan shall occur at intervals of no more than once every three years, unless otherwise agreed with the Trust.

16. Land Purchase

- a) Within two years of the commencement of this consent, the consent holder shall commission an investigation of the effects of flooding on private property and risks to safety on the true right bank of the Clutha River between the Clyde Dam and the Alexandra Bridge caused by or contributed by the consent holder's activities. The investigation shall determine:
 - (i) The nature and extent of the problem if any;
 - (ii) The degree to which the consent holder is responsible;
 - (iii) The options available to mitigate the effects;and report to the Otago Regional Council what action if any has been undertaken.
- b) The consent holder shall purchase an easement over land affected by the operation of this consent namely:
 - (i) CT401/95 (Otago Registry);
 - (ii) Section 12 Block XXXIV town of Alexandra;
 - (iii) Sections 4 & 5 SO Plan 23675 situated in Blocks XIX and XXXIV town of Alexandra;
 - (iv) Section 1 SO Plan 23338 and Section 3 SO Plan 23675 Block XXXIV;

Subject to:

The purchase price being fixed by registered valuation (provided that valuation has been prepared in accordance with commonly accepted valuation principles) and the respective owners of that land agreeing to sell that easement to the consent holder; at the amount of the relevant valuation.

17. Roading Issues

- a) Within two years of the commencement of this consent, the consent holder shall submit a Roading Management Plan to the Otago Regional Council addressing the matters below.
- b) The Roading Management Plan shall be developed in consultation with Transit New Zealand and Central Otago District Council.
- c) The objective of that Roading Management Plan will be to avoid, remedy or mitigate adverse effects of the erosion and flooding on public roads and properly maintained bridges within Central Otago District, where those effects are caused, or contributed to, by the exercise of this consent; and
- d) That Roading Management Plan will outline implementation methods, funding arrangements, and timing of any work which it requires. For the avoidance of doubt, the Roading Management Plan shall provide, amongst other things, for the use of Clyde Dam for access in an emergency, or at other times as requested by Central Otago District Council (when reasonable access across the Clutha River is restricted) provided in all cases that safety, security and operational conditions of the Clyde Dam are not compromised.
- e) The consent holder shall be responsible for ensuring implementation of the Roading Management Plan.

18. Landscape and Visual Amenity Management Plan

- a) No later than 1 July 2025 and five yearly thereafter, the Consent Holder must submit to the Consent Authority a Landscape and Visual Amenity Management Plan (LVAMP) for certification that it:
- i. Has been prepared by a suitably qualified and independent landscape architect;
 - ii. Includes actions, methods, and monitoring programmes to assist in achieving the purpose of the Plan set out in Conditions 18(c) and 18(d) below; and
 - iii. Meets the information requirements in, and gives effect to, the matters set out in Conditions 18(b) – 18(h) below.

A copy of the final LVAMP must also be provided to Kāi Tahu Papatipu Rūnaka, and all other parties who were consulted with in accordance with Condition 18(e).

- b) The LVAMP shall apply to the section of the Lower Manuherekia River shown in Map A.
- c) The purpose of the LVAMP shall be to identify the areas and actions to address landscape and visual amenity effects arising from the Consent Holder's activities involving the excavation of sediment from the river bed in accordance with Condition 7(d) of 2001.398.V2, or any subsequent versions and in the Alexandra reaches and including the Linger and Die area.

Advice note:

The identification and selection of the areas subject to the LVAMP will be set out within the LVAMP in accordance with Condition 18(d). Generally, these locations will be focused on areas within the landscape where the transition within the river system has reached an equilibrium i.e. so that actions can be meaningful and not potentially lost in the next high flow. In some instances however, the areas and actions that will be undertaken will focus on areas.

- d) The LVAMP must include:
- i. A summary of:
 - the existing landscape attributes and values within the Lower Manuherekia River (Map A) at an appropriate scale relative to the purpose of the LVAMP set out in Condition 18(c) and having regard to best practice landscape and visual assessment guidelines;

- the river processes/geomorphology (including sediment levels) as relevant, including the environment anticipated under the existing hydro scheme consents;
 - ii. Identification and quantification of the changes in landscape and visual amenity by referring to any sediment and photographic surveys (undertaken by the consent holder) or any other relevant information (which must be appended);
 - iii. A description of the actions that have been undertaken by the consent holder to maintain landscape and visual amenity within the locations identified in Condition 18(c) within the period June 2024 and December 2025;
 - iv. Identification and rationale for the selection of the proposed areas and actions;
 - v. A description of and a framework to address actions that are to be undertaken by the Consent Holder on an annual basis until the next iteration of the LVAMP in order to address landscape and visual amenity effects of the consent holder's activities within the area subject to the Plan;
 - vi. A description of the actions that will be undertaken as soon as is practicable by the Consent Holder within the relevant locations identified in the LVAMP following a recorded event exceeding 350 cumecs as measured at the Ophir site (Site No.75253);
 - vii. Inclusion of a terrestrial weed management programme including identification and rationale for weed selection and removal, also taking into account potential effects on cultural and/or wider biodiversity values arising from disturbance and removal of weeds in certain locations. Where practicable and appropriate, any replanting shall be undertaken with indigenous species;
 - viii. Maps and/or other visual imagery (photos) supporting the proposed actions to be undertaken by the Consent Holder;
 - ix. Details of the monitoring, timelines and milestones associated with implementing the actions set out within the plan and reporting to the Consent Authority to ensure the purpose of the LVAMP is being met;
 - x. A summary of the consultation undertaken in accordance with Condition 18(e), including any feedback under Condition 18(f).
- e) At least 90 calendar days prior to submission of the final LVAMP (being 1 July 2025 and five yearly thereafter) to the Consent Authority for certification, the consent holder shall submit a draft of the LVAMP for review and comment to:
- i. Kāi Tahu Papatipu Rūnaka.
 - ii. Central Otago District Council;
 - iii. Land Information New Zealand;

- iv. Department of Conservation;
- v. Otago Fish and Game; and
- vi. Any other recreational groups or users of the Lower Manuherekia River or its margins as identified by the Consent Holder.

Advice note: In the event that any of the organisations change their name and/or become known/operate as a different entity in the future but have the same or similar functions, this obligation will continue to apply to those new entities.

- f) The Consent Holder must provide to the Consent Authority at the time the final LVAMP is submitted in accordance with Condition 18(a), the following:
 - i. Documented evidence that the draft LVAMP was submitted to the parties listed in Condition 18(e);
 - ii. Any feedback received from the parties listed in Condition 18(e); and
 - iii. An explanation of whether any comment has or has not been incorporated into the LVAMP and the reasons why.
- g) If any party listed in Condition 18(e) does not provide comments on the LVAMP within a 45-calendar day period, the Consent Holder may continue to finalise the LVAMP for submission to the Consent Authority for certification as if all obligations of Conditions 18(e) and 18(f) are satisfied.
- h) Following a flow event exceeding 350 cumecs within the Manuherekia River measured at the Ophir site (Site No. 75253), the Consent Holder is able to undertake any urgent actions to address landscape and visual amenity effects not otherwise specified in the LVAMP in response to the high flow event.
- i) The Consent Holder must implement the actions set out within the certified LVAMP in accordance with the specifications of the plan.
- j) On an annual basis following the certification of the LVAMP the Consent Holder must prepare a Summary Landscape and Visual Amenity Monitoring Report. The summary report must include:
 - i. A description of the works and actions completed by the consent holder in the previous twelve months in accordance with the LVAMP;
 - ii. Where aspects of the LVAMP have not been implemented within expected timeframes, the report must include the reasons why, and the reasonably practicable measures that have been undertaken by the Consent Holder to address the failure to meet those milestones;
 - iii. Any other relevant actions undertaken by Consent Holder during the previous 12 months;

- iv. Any relevant Rūnaka and community engagement that the Consent Holder has undertaken;
- v. A review of the effectiveness of the LVAMP in meeting its purpose.

The Summary Report must be submitted to the Otago Regional Council on an annual basis by 30 June each year following certification of the LVAMP. The Summary Report must relate to the activities undertaken in accordance with the certified LVAMP during the preceding year up to and including 31 December. Compliance with this condition can be achieved by incorporating the Summary Report into an overarching compliance report which covers the Consent Holder's existing consented obligations in terms of reporting to the Consent Authority on an annual basis.

A copy of the Summary Report must also be provided to Kāi Tahu Papatipu Rūnaka, and all other parties who were consulted with in accordance with Condition 18(e) as part of the development of the final LVAMP.

19. Passage of Native Fish

- a) The consent holder, in consultation with the Department of Conservation and Ngai Tahu, shall prepare a report to the consent authority detailing the current state of knowledge of options for the downstream passage of adult eels, and how these options might be implemented for the Roxburgh Dam.
- b) Within five years of the commencement of this consent, the consent holder shall establish a system for downstream passage of adult eels past the Roxburgh Dam in accordance with the recommendations contained in the report under condition 19 a).

20. Sediment Management Plan

- a) The consent holder shall within six months of the commencement of this consent commission the preparation of an option plan for the long term management of sediment in the Clutha Catchment that is either stored within or moving through the Crown easement area or is discharged through the Clyde or Roxburgh Dams.

In assessing the options, consideration shall be given to:

- (i) Sediment deposition in the head of the Clutha Arm of Lake Dunstan and the implications for the Bendigo Wildlife Area;
 - (ii) Maintaining access to water for the existing surface water abstractors and the provision of access to water for future users;
 - (iii) The implications for groundwater abstractors adjacent to the Kawarau Arm of Lake Dunstan specifically those with bores within 100 metres of the existing lake edge;
 - (iv) Effects on flooding levels in Lake Dunstan and at Alexandra and along the lower Manuherikia River;
 - (v) Implications of revising the Clutha Flood Management Plan if it is not possible to obtain easements over land affected by raised flood levels;
 - (vi) Implications of changes in sediment trap efficiency of Lake Dunstan if the tipping face is allowed to advance down the Cromwell to Clyde Reach, including in particular the effect on flood levels at Alexandra;
 - (vii) The causes and mechanisms of the deposition of fine sediment in and on the margins of the lower Clutha River from Roxburgh Dam to the sea;
 - (viii) The extent to which sediment starvation contributes to coastal erosion problems.
- b) The plan shall also include an assessment of the adverse and positive effects of each option, and the technical feasibility of each option together with a draft management plan for the imposition of the recommended options.
- c) The plan shall be concluded within four years of the commencement of this consent and forwarded to Otago Regional Council.
- d) The consent holder shall commission a peer review of the plan by suitably qualified experts independent of the consent holder.
- e) Within five years of commencement of this consent the consent holder shall submit the plan and peer review prepared under this condition to Otago Regional Council.
- f) Within six months of receiving the plan and peer review, Otago Regional Council may serve notice pursuant to section 128 of the Resource Management Act 1991 of its intention to review the conditions of this consent and the other consents listed in condition 2 to consider the adequacy of conditions governing the long-term management of sediment in the Clutha Catchment.

21. Close Down Condition

If at the expiry of the term of this consent the consent holder:

- a) does not apply for a similar new consent; or

- b) applies for a new (replacement) resource consent and the application is refused –

then the consent holder shall cease operating the resource consent on the following conditions:

- (i) it shall (temporarily) continue to act as if the resource consent was in existence;
- (ii) it shall forthwith after the resource consent expires or a renewal is refused (as the case may be) and after consulting with Queenstown Lakes District Council, Central Otago District Council, Clutha District Council and Fish & Game New Zealand (Otago Region) prepare a management plan for the closing down of the scheme of which the resource consent is part, and submit that management plan to the Otago Regional Council;
- (iii) after the management plan is approved by the Otago Regional Council, the consent-holder shall follow the management plan with any changes made by the Otago Regional Council for the closing down of the scheme for as long as is required by that management plan.

22. Raising of Maximum Operating Level to 132.6m

- (a) The consent holder shall revise the Contact Energy Clutha Flood Rules to ensure that when inflows to Lake Roxburgh reach 700 cumecs, the lake level will be lowered to below 132.0m at the dam as soon as practicable. These changes to the Clutha flood rules shall be submitted to the Consent Authority for its approval. The Roxburgh Dam maximum operating level shall not be increased above 132.0m until the Consent Authority approves in writing the changes to the Clutha Flood Rules.
- (b)
 - (i) The consent holder shall commission a suitably experienced landscape designer to undertake an amenity mitigation report to identify works required to mitigate the amenity value effects of raising the maximum operating level of the Roxburgh Dam to 132.6m. These works shall include (but not be limited to) works at McKenzies Beach, Doctors Point and gravel beaches of river mouths entering Lake Roxburgh.
 - (ii) Any recommended works identified in the amenity mitigation report and approved in writing by the Consent Authority shall be completed before the maximum operating level is increased above 132.0m.
- (c) If in undertaking the works identified in condition 22(b)(ii) the consent holder:
 - (i) discovers koiwi tangata (human skeletal remains), waahi taoka (resources of importance including pounamu/greenstone), waahi tapu (places or features of special significance) or other Maori artefact material, the consent holder shall without delay:
 - (1) notify the Consent Authority, Tangata whenua and the New Zealand Historic Places Trust and in the case of skeletal remains, the New Zealand Police; and
 - (2) stop work within the immediate vicinity of the discovery to allow a site inspection by the New Zealand Historic Places Trust and the

appropriate runanga and their advisors, who shall determine whether the discovery is likely to be extensive, if a thorough site investigation is required and whether an Archaeological Authority is required.

Any koiwi tangata discovered shall be handled and removed by tribal elders responsible for the tikanga (custom) appropriate to its removal or preservation.

Site work shall recommence following consultation with the Consent Authority, the New Zealand Historic Places Trust, Tangata whenua, and in the case of skeletal remains, the New Zealand Police, provided that any relevant statutory permissions have been obtained.

- (ii) discovers any feature or archaeological material that predates 1900, or heritage material, or disturbs a previously unidentified archaeological or heritage site, the consent holder shall without delay:
 - (1) stop work within the immediate vicinity of the discovery or disturbance; and
 - (2) advise the Consent Authority, the New Zealand Historic Places Trust and, in the case of Maori features or materials, the Tangata whenua and, if required, shall make an application for an Archaeological Authority pursuant to the Historic Places Act 1993; and
 - (3) arrange for a suitably qualified archaeologist to undertake a survey of the site.

Site work shall recommence following consultation with the Consent Authority.

- (d) Should the Roxburgh Walkway from Graveyard Gully to Doctors Point become inundated or be damaged by the action of the consent holder in raising the maximum operating level of the Roxburgh Dam to 132.6m the consent holder shall be required to reinstate or reroute the Roxburgh Walkway (the remedial works) to the standard no less than that it was prior to the raising of the maximum operating level to 132.6m. In determining what remedial works are required, the consent holder shall consult with the Department of Conservation and any affected land occupiers.

Advice Note: the degree of any inundation or damage to the Roxburgh Walkway shall be determined by the Department of Conservation Central Otago Area Manager and the Otago Regional Council.

- (e) The consent holder shall advise the consent authority in writing of its compliance with Archaeological Authority 2009/272 prior to any increase of the maximum operating level above 132m. This notification shall include copies of all reports required to be provided to NZHPT under conditions 6, 7 and 9 of Archaeological Authority 2009/272.
- (f) (i) After 24 months and within 30 months of the raising of the maximum operating level to 132.6m at the Roxburgh Dam, the consent holder shall commission a report by suitably qualified experts to review any adverse effects on the environment of operating the maximum operating level of 132.6m at the Roxburgh Dam.

- (ii) The report required in Condition 22 (f)(i) shall be forwarded to the Otago Regional Council within 33 months of raising of the maximum operating level to 132.6m at the Roxburgh Dam.
- (iii) Should adverse effects be identified in the report required in Condition 22 (f)(i), the Otago Regional Council may, within six months of receiving the report in accordance with section 128 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent.

Issued at Dunedin this 9th Day of August 2007 following the Environment Court Order of Judge Jackson dated 29 March 2007.

Reissued this 15th day of July 2008 to reflect a correction to the legal description and expiry date.

Reissued at Dunedin this 15th day of December 2009 to reflect a variation to condition 9(a) and addition of condition 22.

Reissued at Dunedin this 2nd day of May 2013 to reflect a variation to Condition 9.

Reissued at Dunedin this 8th day of September 2014 to reflect a variation to Condition 10.

Reissued this day 21st day of April 2015 to reflect a variation to add condition 9(f)

Reissued this 24th day of May 2023 to reflect a review of condition 18



Allan Cubitt
Independent Decision Maker for the Otago Regional Council



Appendix E - LaSabel Monitoring Cross-section

