

CRIFFEL WATER LIMITED DRAFT CONDITIONS AS AT 9 OCTOBER 2019

Our Reference:

Consent No. RM16.093.01

WATER PERMIT

Pursuant to Section 104C of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Criffel Water Limited

Address: C/- Gallaway Cook Allan, 276 Princess Street, Dunedin

Purpose: To take and use water as primary and supplementary allocation from Luggate Creek for the purpose of irrigation, stock drinking water and domestic supply.

Term: Expiring 1 December 20292054

Commented [KS1]: The applicant seeks a term of not more than 35 years and not less than 25 years.

Location of Point of Abstraction: Luggate Creek, approximately 2 kilometres southeast of the intersection of Smith Road and Mount Barker Road, Luggate

Legal Description of land at point of abstraction: Section 3 SO 300466

Legal Description of land(s) where water is to be used: Various within the Criffel Water Limited Command Area, as shown on the plan attached as Appendix 1 to this consent.

Map Reference at Point of Abstraction: NZTM 2000 E1300149 N5038142

Conditions

Specific

1. This permit shall not commence until 2 October 2021.

4.2. If this consent is not given effect to within a period of two years from the date of commencement of this consent, this consent must lapse under Section 125 of the Resource Management Act 1991.

2.3. (a) The take and use of surface water as primary and supplementary allocation from Luggate Creek at NZTM 2000 E1300149 N5038142 on land legally described as Section 3 SO 300466 for irrigation and irrigation area on land within the Criffel

Water Limited Command Area must be carried out in accordance with the plans and all information submitted with the application dated 19 September 2019.

- (b) If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent must prevail.
3. (a) The rate and quantity of abstraction for primary allocation must not exceed:
- (i) 358 litres per second;
 - (ii) ~~769,417~~ 864,124 cubic metres per month;
 - (iii) ~~3,879,273~~ 4,640,024 cubic metres between 1 July in a year and 30 June in the following year.
- (b) The rate of abstraction as first block supplementary allocation must not exceed:
- (i) 170 litres per second;
- (c) The rate of abstraction as second block supplementary allocation must not exceed:
- (i) 80 litres per second;
- (d) The total rate of abstraction (primary and supplementary) must not exceed:
- (i) ~~4,273,047~~ 1,357,724 cubic metres per month; and
 - (ii) ~~6,409,673~~ 7,301,624 cubic metres per year.
4. No abstraction, other than for stock drinking water purposes, and an individual's domestic supply, during the period 1 November to 30 April in the following year must occur when flows in the Luggate Creek are less than the minimum flow of 180 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199).
5. No abstraction, other than for stock drinking water purposes, and an individual's domestic supply, during the period 1 May to 30 October in the following year must occur when flows in the Luggate Creek are less than the minimum flow of 500 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199).
6. The first block supplementary take from Luggate Creek must only occur when the flow exceeds 788 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199) and will not cause the flow in Luggate Creek to fall below this level.
7. The second block supplementary take from Luggate Creek must only occur when the flow exceeds 1038 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199) and will not cause the flow in Luggate Creek to fall below this level.
8. A residual flow of no less than 90 litres per second must be maintained in Luggate Creek immediately downstream of the intake weir (NZTM 2000 E1300149 N5038142) for this permit.

Commented [KS2]: Table 6 M Hickey Evidence

~~9. A fish screen must be designed and installed that meets the following requirements:~~

- ~~(a) Water must only be taken when a fish screen with a mesh size of maximum slot width of 3mm is operated and maintained across the full width of the intake to ensure that fish and fish fry are prevented from passing through the intake screen; and~~
- ~~(b) As far as possible, the screen area must be designed to ensure the calculated average through screen velocity does not exceed 0.12 m/s if a self-cleaning mechanism is in place, or 0.06 m/s if no self-cleaning mechanism is in place.~~
- ~~(c) The sweep velocity parallel to the face of the screen must exceed the design approach velocity.~~

~~Prior to installation of any fish screen, a report containing final design plans and illustrating how the screen will meet the require design criteria and an operation and maintenance plan should be provided to the Consent Authority.~~

~~10. The fish screen required by Condition 9 must be maintained in good working order, to ensure that the screen is performing as designed. Records must be kept of all inspection and maintenance and these should be made available to the Consent Authority, on request.~~

~~9. This permit must be exercised or suspended in accordance with any Consent Authority approved rationing regime that applies to the Luggate Creek catchment.~~

~~44.10. The Consent Holder shall exercise the permit in accordance with any established water management group or water allocation committee approved by the Otago Regional Council.~~

~~12.11. Prior to the exercise of this permit, the consent holder must enter into a low flow agreement or rationing agreement approved by a water management group operating in the Luggate Catchment. The purpose of the agreement is to manage abstractions within the catchment to ensure that the minimum flow is met. The agreement must include (but not be limited to) the following;~~

- ~~(a) Communications protocol between Luggate Catchment water users for reducing takes to meet minimum flow requirements as flows drop; NB: Priority will be given to providing communal domestic supply first in terms of meeting minimum flow requirements.~~
- ~~(b) Methodology to be followed by consent holders if the communications protocol cannot be followed;~~
- ~~(c) Methodology for reviewing process in (a) and (b) above in the event that the minimum flow is breached to avoid the same issue arising again.~~

~~13.12. This permit must be exercised in accordance with the low flow agreement or rationing agreement.~~

~~14.13. The consent holder must review, and if appropriate, update the agreement prepared in accordance with Condition 12, at any intervals not exceeding 2 years from the date of commencement of this consent. If any amendments are made to the low flow agreement a copy of the updated agreement must be provided to the ORC following completion of the review.~~

Commented [KS3]: Recommend deleting in accordance with Paragraph 40 Allibone Evidence.

Performance Monitoring

- ~~45.14.~~ (a) The Consent Holder must install a water meter to record the water take, at the point of take, with an error accuracy range of +/- 5% over the meters nominal flow range, and a telemetry compatible datalogger with at least 24 months data storage and a telemetry unit to record the rate and volume of take, and the date and time this water was taken.
- (b) The data logger must record the date, time and flow in litres per second.
- (c) Data must be provided once daily to the Consent Authority by means of telemetry. The Consent Holder must ensure data compatibility with the Consent Authority's time series database.
- (d) The water meter must be installed according to the manufacturer's specifications and instructions. There must be enough space in the pipe to allow for verification of the accuracy of the meter under condition (g).
- (e) The consent holder must ensure the full operation of the water meter, datalogger and telemetry unit at all times during the exercise of this consent. All malfunctions of the water meter and/or datalogger and/or telemetry unit during the exercise of this consent must be report to the Consent Authority within 5 working days of observation and appropriate repairs must be performed within 5 working days. Once the malfunction has been remedied, a Water Measuring Device Verification Form completed with photographic evidence must be submitted to the Consent Authority within 5 workings days of completion of repairs.
- (f) The installation of the water meter, datalogger and telemetry unit must be completed to full and accurate operation prior to the exercise of the consent. The Consent Holder must forward a copy of the installation certificate to the Consent Authority within one month of installing the water meter datalogger and telemetry unit.
- (g) (i) If a mechanical insert water meter is installed it must be verified for accuracy each and every year from the first exercise of this consent.
- (ii) Any electromagnetic or ultrasonic flow meter must be verified for accuracy every five years from the first exercise of this consent.
- (iii) Each verification must be undertaken by a Consent Authority approved operator and a Water Measuring Device Verification Form must be provided to the Consent Authority within 5 working days of the verification being performed, and at any time upon request.
- ~~46.15.~~ Within 3 years of the commencement of this consent, the Consent Holder must submit to the Consent Authority a Scheme Management Pan. The Scheme Management Plan must include (but not be limited to) the following:
- (a) A plan identifying the irrigation area at the commencement of this consent with the number of hectares specified.
- (b) A plan identifying any expanded irrigation area since the commencement of this consent, with the number of hectares specified.
- ~~(c)~~ A plan identifying further expanded areas of irrigation still to be developed with the number of hectares specified.
- ~~(d)~~ Confirmation of any residential development undertaken within the Command Area and corresponding change in use of water.
- ~~(e)~~ A description of water use efficiency or conveyance upgrade that have taken place since the commencement of this consent including any;
- (i) Upgrades to existing race network with may include piping;

- (ii) Establishment of any water storage infrastructure;
- ~~(e)~~(f) A description of water use efficiency of conveyance upgrades that are planned within the next 3 years.

~~47-16.~~ The Consent Holder must review and update the plan prepared in accordance with Condition ~~46-15~~ at intervals not exceeding 2 years from the date of implementation of this plan. Any updated plans must be provided to the ORC following completion of the review.

~~48-17.~~ On the ~~5th-10th~~ Anniversary of the commencement of this consent any expanded areas of irrigation identified within the Scheme Management Plan than have not been developed for irrigation will no longer be able to be developed and the water volume set aside for this future irrigation area must be surrendered by the consent holder.

~~49. — A water use efficiency report must be provided to the Consent Authority in June each year. The report must assess the water use over the previous 12 months in respect of the efficient use of water for the purpose consented. This report must include, but not be limited to:~~

- ~~(a) — Area, crop type, number of harvest per year, and timing.~~
- ~~(b) — Annual summary of water usage (month by month, and related to crops in the ground)~~
- ~~(c) — Reasons why use may have varied from the previous year~~
- ~~(d) — Information demonstrating irrigation equipment that has been used and decision-making regarding efficiency of use (e.g. soil moisture data, irrigation scheduling, meter accuracy checks, computer control of irrigation) and any changes planned for the coming years.~~
- ~~(e) — Water conservation steps taken.~~

Commented [KS4]: Recommend delete as purpose of condition is unclear. If required suggest this be incorporated into Condition 15.

General

~~20-18.~~ The consent holder must take all practicable steps to ensure that:

- (a) The volume of water used for irrigation does not exceed soil field capacity of the irrigated areas;
- (b) The irrigation does not cause surface run-off;
- (c) Leakage from pipes and structures is avoided;
- (d) The use of water onto non-targeted areas is avoided;
- (e) Irrigation induced soil erosion and soil pugging does not occur;
- (f) Soil quality is not degraded as a consequence of irrigation; and
- (g) Loss of water, nutrients, and agrichemicals by percolation to groundwater is minimised.

Review

~~24-19.~~ The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within 3 months of each anniversary of the commencement of this consent or within two months of any enforcement action taken by the Consent Authority in relation to the exercise of this consent for the purpose of:

- (a) Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the consent;

- (b) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant plans, and/or the Otago Regional Policy Statement;
- (c) Reviewing the frequency of monitoring or reporting required under this consent;
- (d) Varying the consented quantities and rates of take and monitoring, operating and reporting requirements, and performance requirements to respond to;
 - (i) The results of previous monitoring carried out under this consent and/or;
 - (ii) Water availability, including alternative water sources;
 - (iii) Actual and potential water use
 - (iv) Surface water flow and level regimes;
 - (v) Surface water quality
 - (vi) Efficiency of water use;
 - (vii) Instream biota, including fish passage and the functioning of aquatic ecosystems; or
 - (viii) New requirements for measuring, recording and transmission.

Notes to Consent Holder

1. *Water may be taken at any time for reasonable stock water and domestic supply purposes.*
2. *The Consent Holder must be responsible for obtaining any relevant information on minimum flows in the Luggate Creek to ensure compliance with Conditions 4,5, 6, and 7.*
3. *If you require a replacement consent upon the expiry date of this consent, any new application should be lodged at least 6 months prior to the expiry date of this consent. Applying at least 6 months before the expiry date may enable you to continue to exercise this consent under Section 124 of the Resource Management Act 1991 until a decision is made on the replacement application (and any appeals are determined). Primary allocation may be lost if an application is not made at least 6 months prior to the expiry and will be lost if an application is not made at least 3 months prior to expiry. A late application will likely result in the application being treated as supplementary allocation if any such allocation is available.*
4. *The consent holder must not that Plan Change 6A of the Regional Plan Water, which is now operative, requires the control of farm contaminants in runoff and leaching of nutrients to groundwater. If such discharges are managed such that the thresholds in schedule 16A are no met by 1 April 2020 then consent will be required for the discharge of contaminants. Information about on farm nutrients must also be kept as of May 2014 for providing in puts to OVERSEER which models leaching of nutrients to groundwater. For other information about obligations under Plan Change 6A refer to the ORC website.*
- 4-5. *The consent holder is responsible for obtaining all other necessary consents, permits, and licence, including those under the Building Act 2004, the Biosecurity Act 1993, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety in Employment Act 1992). The regulations, relevant Bylaws,*

and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.

5.6. *WEX0162 was approved by the Consent Authority on 17 March 2015 to allow the water measuring device to be installed within a 20-metre radius of NZTM 2000 E1300123 N5038518.*

LUGGATE IRRIGATION DRAFT CONDITIONS AS AT 9 OCTOBER 2019

Our Reference:

Consent No. RM18.345.01

WATER PERMIT

Pursuant to Section 104C of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Luggate Irrigation Company Limited ~~and Lake McKay Station Limited~~
Address: C/- Gallaway Cook Allan, 276 Princess Street, Dunedin
Purpose: To take and use water as primary and supplementary allocation from Luggate Creek ~~and Alice Burn~~ for the purpose of irrigation stock drinking water and domestic supply.

Commented [KS5]: Applicant seeks separate permits for Lake McKay Station & Luggate Irrigation

Term: Expiring 1 December ~~2029~~ 2054

Commented [KS6]: The applicant seeks a term of not more than 35 years and not less than 25 years.

Location of Point of Abstraction: Site 1: Approximately ~~6.91.74~~ 6.92 km west of the intersection of ~~Hopkins Street Kingan Road~~ and Luggate Cromwell Road (State Highway 6)

Site 2: Approximately ~~6.92~~ 6.92 km west of the intersection of ~~Hopkins Street Kingan Road~~ and Luggate Cromwell Road (State Highway 6)

~~Site 3: Approximately 1.87 km west of the intersection of Hopkins Street and Luggate Cromwell Road (State Highway 6)~~

~~Site 4: Approximately 2.1 km west of the intersection of Hopkins Street and Luggate Cromwell Road (State Highway 6)~~

~~Site 5: Approximately 2 km west of the intersection of Hopkins Street and Luggate Cromwell Road (State Highway 6)~~

~~Site 6: Approximately 1.89 km west of the intersection of Hopkins Street and Luggate Cromwell Road (State Highway 6)~~

Legal Description of land at point of abstraction: ~~Lot 2 DP 342167, Lot 2 DP 342167, Part 6 SO 300466, Lot 1 DP 534249~~ Section 1 SO 300466, ~~CL Book XIV~~ Cardrona SD

Legal Description of land(s) where water is to be used: Various within the Luggate Irrigation Company Limited ~~and Lake McKay Station Limited~~ Command Area, as shown on the plan attached as Appendix 1 to this consent.

Map Reference at Point of Abstraction: Site 1: NZTM 2000 ~~E1300149 E1302961~~ N5038142N5037944
Site 2: NZTM 2000 ~~E1300149 E1302755~~ N5038142N5037562
Site 3: NZTM 2000 E1300149 N5038142
Site 4: NZTM 2000 E1300149 N5038142
Site 5: NZTM 2000 E1300149 N5038142
Site 6: NZTM 2000 E1300149 N5038142

Conditions

Specific

1. ~~This permit shall not commence until 2 October 2021.~~
- 4.2. If this consent is not given effect to within a period of two years from the date of commencement of this consent, this consent must lapse under Section 125 of the Resource Management Act 1991.
- 2.3. The take and use of surface water as primary and supplementary allocation from Luggate Creek and Alice Burn must be carried out in accordance with the plans and all information submitted with the application dated 19 September 2019. If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent must prevail.
3. (a) The rate and quantity of abstraction for primary allocation must not exceed:
 - (i) ~~480.87~~ litres per second;
 - (ii) ~~927,844,211,227~~-cubic metres per month;
 - (iii) ~~4,502,162- 1,200,075~~ cubic metres between 1 July in a year and 30 June in the following year.
- (b) The rate of abstraction as first block supplementary allocation must not exceed:
 - (i) ~~80.27~~ litres per second;
- (c) The rate of abstraction as second block supplementary allocation must not exceed:
 - (i) ~~86.42~~ litres per second;
- (d) The total rate of abstraction (primary and supplementary) must not exceed:

Commented [KS7]: Table 7 M Hickey evidence plus communal domestic supply 8 L/sec continuous flow.

Commented [KS8]: Table 7 M Hickey evidence plus communal domestic supply 2000 L/day for 250 dwellings for 365 days.

- (i) 4,761,024 444,160 cubic metres per month; and
- (ii) 4,761,024 2,353,255 cubic metres per year.
4. No abstraction, other than for stock drinking water purposes and an individual's domestic supply, during the period 1 November to 30 April in the following year must occur when flows in the Luggate Creek are less than the minimum flow of 180 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199).
5. No abstraction, other than for stock drinking water purposes and an individual's domestic supply, during the period 1 May to 30 October in the following year must occur when flows in the Luggate Creek are less than the minimum flow of 500 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199).
6. The first block supplementary take from Luggate Creek must only occur when the flow exceeds 788 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199) and will not cause the flow in Luggate Creek to fall below this level.
7. The second block supplementary take from Luggate Creek must only occur when the flow exceeds 1038 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199) and will not cause the flow in Luggate Creek to fall below this level.
8. A residual flow of no less than 46-100 litres per second must be maintained in the Alice Burn North Branch Luggate Creek immediately downstream of the intake weir (NZTM 2000 E1300149 E1302961 N5038142 N5037944) for this permit.
- 8-9. A visually connected residual flow must be maintained in the Alice Burn immediately downstream of the intake weir (NZTM 2000 E1302755 N5037562) to the confluence with the North Branch Luggate Creek.
- 9-10. A fish screen must be designed and installed that meets the following requirements:
- (a) Water must only be taken when a fish screen with a mesh size of maximum slot width of 3mm is operated and maintained across the full width of the intake to ensure that fish and fish fry are prevented from passing through the intake screen; and
- (b) As far as possible, the screen area must be designed to ensure the calculated average through screen velocity does not exceed 0.12 m/s if a self-cleaning mechanism is in place, or 0.06 m/s if no self-cleaning mechanism is in place.
- (c) The sweep velocity parallel to the face of the screen must exceed the design approach velocity.
- Prior to installation of any fish screen, a report containing final design plans and illustrating how the screen will meet the required design criteria and an operation and maintenance plan should be provided to the Consent Authority.
- 10-11. The fish screen required by Condition 9-10 must be maintained in good working order, to ensure that the screen is performing as designed. Records must be kept of all

Commented [KS9]: The applicant has concerns with the lower velocity for non-self-cleaning screens and seeks greater clarification from ORC of the purpose of this condition.

inspection and maintenance and these should be made available to the Consent Authority, on request.

~~12.~~ This permit must be exercised or suspended in accordance with any Consent Authority approved rationing regime that applies to the Luggate Creek catchment.

~~13.~~ The Consent Holder shall exercise the permit in accordance with any established water management group or water allocation committee approved by the Otago Regional Council.

~~14.~~~~14.~~ Prior to the exercise of this permit, the consent holder must enter into a low flow agreement or rationing agreement approved by a water management group operating in the Luggate Catchment. The purpose of the agreement is to manage abstractions within the catchment to ensure that the minimum flow is met. The agreement must include (but not be limited to) the following;

- (a) Communications protocol between Luggate Catchment water users for reducing takes to meet minimum flow requirements as flows drop; NB: Priority will be given to providing communal domestic supply first in terms of meeting minimum flow requirements.
- (b) Methodology to be followed by consent holders if the communications protocol cannot be followed;
- (c) Methodology for reviewing process in (a) and (b) above in the event that the minimum flow is breached to avoid the same issue arising again.

~~15.~~~~15.~~ This permit must be exercised in accordance with the low flow agreement or rationing agreement.

~~16.~~~~16.~~ The consent holder must review, and if appropriate, update the agreement prepared in accordance with Condition 12, at any intervals not exceeding 2 years from the date of commencement of this consent. If any amendments are made to the low flow agreement a copy of the updated agreement must be provided to the ORC following completion of the review.

Performance Monitoring

- ~~17.~~~~17.~~ (a) The Consent Holder must install a water meter to record the water take, at the point of take, with an error accuracy range of +/- 5% over the meters nominal flow range, and a telemetry compatible datalogger with at least 24 months data storage and a telemetry unit to record the rate and volume of take, and the date and time this water was taken.
- (b) The data logger must record the date, time and flow in litres per second.
- (c) Data must be provided once daily to the Consent Authority by means of telemetry. The Consent Holder must ensure data compatibility with the Consent Authority's time series database.
- (d) The water meter must be installed according to the manufacturer's specifications and instructions. There must be enough space in the pipe to allow for verification of the accuracy of the meter under condition (g).
- (e) The consent holder must ensure the full operation of the water meter, datalogger and telemetry unit at all times during the exercise of this consent. All malfunctions of the water meter and/or datalogger and/or telemetry unit during the exercise of this consent must be report to the Consent Authority within 5 working days of

observation and appropriate repairs must be performed within 5 working days. Once the malfunction has been remedied, a Water Measuring Device Verification Form completed with photographic evidence must be submitted to the Consent Authority within 5 working days of completion of repairs.

- (f) The installation of the water meter, datalogger and telemetry unit must be completed to full and accurate operation prior to the exercise of the consent. The Consent Holder must forward a copy of the installation certificate to the Consent Authority within one month of installing the water meter datalogger and telemetry unit.
- (g)
 - (i) If a mechanical insert water meter is installed it must be verified for accuracy each and every year from the first exercise of this consent.
 - (ii) Any electromagnetic or ultrasonic flow meter must be verified for accuracy every five years from the first exercise of this consent.
 - (iii) Each verification must be undertaken by a Consent Authority approved operator and a Water Measuring Device Verification Form must be provided to the Consent Authority within 5 working days of the verification being performed, and at any time upon request.

~~45-18.~~ Within 3 years of the commencement of this consent, the Consent Holder must submit to the Consent Authority a Scheme Management Plan. The Scheme Management Plan must include (but not be limited to) the following;

- (a) A plan identifying the irrigation area at the commencement of this consent with the number of hectares specified.
- (b) A plan identifying any expanded irrigation area since the commencement of this consent, with the number of hectares specified.
- ~~(c)~~ A plan identifying further expanded areas of irrigation still to be developed with the number of hectares specified.
- ~~(d)~~ Confirmation of any residential development undertaken within the Command Area and corresponding change in use of water.
- ~~(e)~~(e) A description of water use efficiency or conveyance upgrade that have taken place since the commencement of this consent including any;
 - ~~(ii)~~(iii) Upgrades to existing race network with may include piping;
 - ~~(ii)~~(iv) Establishment of any water storage infrastructure;
- ~~(e)~~(f) A description of water use efficiency of conveyance upgrades that are planned within the next 3 years.

~~46-19.~~ The Consent Holder must review and update the plan prepared in accordance with Condition ~~46-18~~ at intervals not exceeding 2 years from the date of implementation of this plan. Any updated plans must be provided to the ORC following completion of the review.

~~47-20.~~ On the ~~5th-10th~~ Anniversary of the commencement of this consent any expanded areas of irrigation identified within the Scheme Management Plan than have not been developed for irrigation will no longer be able to be developed and the water volume set aside for this future irrigation area must be surrendered by the consent holder.

~~18.~~ ~~A water use efficiency report must be provided to the Consent Authority in June each year. The report must assess the water use over the previous 12 months in respect of the efficient use of water for the purpose consented. This report must include, but not be limited to:~~

- ~~(a) Area, crop type, number of harvests per year, and timing.~~

- ~~(b) Annual summary of water usage (month by month, and related to crops in the ground)~~
- ~~(c) Reasons why use may have varied from the previous year~~
- ~~(d) Information demonstrating irrigation equipment that has been used and decision-making regarding efficiency of use (e.g. soil moisture data, irrigation scheduling, meter accuracy checks, computer control of irrigation) and any changes planned for the coming years.~~
- ~~(e) Water conservation steps taken.~~

Commented [KS10]: Recommend delete as purpose of condition is unclear. If required suggest this be incorporated into Condition 15.

General

19:21. The consent holder must take all practicable steps to ensure that:

- (a) The volume of water used for irrigation does not exceed soil field capacity of the irrigated areas;
- (b) The irrigation does not cause surface run-off;
- (c) Leakage from pipes and structures is avoided;
- (d) The use of water onto non-targeted areas is avoided;
- (e) Irrigation induced soil erosion and soil pugging does not occur;
- (f) Soil quality is not degraded as a consequence of irrigation; and
- (g) Loss of water, nutrients, and agrichemicals by percolation to groundwater is minimised.

Review

20:22. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within 3 months of each anniversary of the commencement of this consent or within two months of any enforcement action taken by the Consent Authority in relation to the exercise of this consent for the purpose of:

- (a) Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the consent;
- (b) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant plans, and/or the Otago Regional Policy Statement;
- (c) Reviewing the frequency of monitoring or reporting required under this consent;
- (d) Varying the consented quantities and rates of take and monitoring, operating and reporting requirements, and performance requirements to respond to;
 - (i) The results of previous monitoring carried out under this consent and/or;
 - (ii) Water availability, including alternative water sources;
 - (iii) Actual and potential water use
 - (iv) Surface water flow and level regimes;
 - (v) Surface water quality
 - (vi) Efficiency of water use;
 - (vii) Instream biota, including fish passage and the functioning of aquatic ecosystems; or
 - (viii) New requirements for measuring, recording and transmission.

Notes to Consent Holder

1. *Water may be taken at any time for reasonable stock water and domestic supply purposes.*
2. *The Consent Holder must be responsible for obtaining any relevant information on minimum flows in the Luggate Creek to ensure compliance with Conditions 4,5, 6, and 7.*
3. *If you require a replacement consent upon the expiry date of this consent, any new application should be lodged at least 6 months prior to the expiry date of this consent. Applying at least 6 months before the expiry date may enable you to continue to exercise this consent under Section 124 of the Resource Management Act 1991 until a decision is made on the replacement application (and any appeals are determined). Primary allocation may be lost if an application is not made at least 6 months prior to the expiry and will be lost if an application is not made at least 3 months prior to expiry. A late application will likely result in the application being treated as supplementary allocation if any such allocation is available.*
4. *The consent holder must not that Plan Change 6A of the Regional Plan Water, which is now operative, requires the control of farm contaminants in runoff and leaching of nutrients to groundwater. If such discharges are managed such that the thresholds in schedule 16A are no met by 1 April 2020 then consent will be required for the discharge of contaminants. Information about on farm nutrients must also be kept as of May 2014 for providing in puts to OVERSEER which models leaching of nutrients to groundwater. For other information about obligations under Plan Change 6A refer to the ORC website.*
5. *The consent holder is responsible for obtaining all other necessary consents, permits, and licence, including those under the Building Act 2004, the Biosecurity Act 1993, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety in Employment Act 1992). The regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.*

PROPOSED LAKE MCKAY LIMITED DRAFT CONDITIONS AS AT 9 OCTOBER 2019

Our Reference: Consent No.-RM18.345.0402

WATER PERMIT

Pursuant to Section 104C of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: ~~Luggate Irrigation Company Limited and Lake~~ McKay Station Limited

Commented [KS11]: Applicant seeks separate permits for Lake McKay Station & Luggate Irrigation

Address: C/- Gallaway Cook Allan, 276 Princess Street, Dunedin

Purpose: To take and use water as primary and supplementary allocation from Luggate Creek and Alice Burn for the purpose of irrigation- stock drinking water and domestic supply.

Term: Expiring 1 December 2020 2054

Commented [KS12]: The applicant seeks a term of not more than 35 years and not less than 25 years.

Location of Point of Abstraction: Site 1: Approximately 6.9-7.8 km west of the intersection of Hopkins Street Kingan Road and Luggate Cromwell Road (State Highway 6)

Site 2: Approximately 6.95.7 km west of the intersection of Hopkins Street Kingan Road and Luggate Cromwell Road (State Highway 6)

~~Site 3: Approximately 1.87 km west of the intersection of Hopkins Street and Luggate Cromwell Road (State Highway 6)~~

~~Site 4: Approximately 2.1 km west of the intersection of Hopkins Street and Luggate Cromwell Road (State Highway 6)~~

~~Site 5: Approximately 2 km west of the intersection of Hopkins Street and Luggate Cromwell Road (State Highway 6)~~

~~Site 6: Approximately 1.89 km west of the intersection of Hopkins Street and Luggate Cromwell Road (State Highway 6)~~

Legal Description of land at point of abstraction: Lot 2 DP 342167, Lot 2 DP 342167, Part 6 SO 300466, Section 1 SO 300466, CL Bock XIV Cardrona SD Lot 3 DP515146

Legal Description of land(s) where water is to be used: Various within the ~~Luggate Irrigation Company Limited and~~ Lake McKay Station Limited Command Area, as shown on the plan attached as Appendix 1 to this consent.

Map Reference at Point of Abstraction: Site 1: NZTM 2000 ~~E1300149~~ E1300464
N5038142 N5032792
Site 2: NZTM 2000 E130 18610449
N5038142 N5033204
Site 3: NZTM 2000 ~~E1300149~~ N5038142
Site 4: NZTM 2000 ~~E1300149~~ N5038142
Site 5: NZTM 2000 ~~E1300149~~ N5038142
Site 6: NZTM 2000 ~~E1300149~~ N5038142

Conditions

Specific

1. This permit shall not commence until 2 October 2021.
- 1-2. If this consent is not given effect to within a period of two years from the date of commencement of this consent, this consent must lapse under Section 125 of the Resource Management Act 1991.
- 2-3. The take and use of surface water as primary and supplementary allocation from Luggate Creek and Alice Burn must be carried out in accordance with the plans and all information submitted with the application dated 19 September 2019. If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent must prevail.
34. (a) The rate and quantity of abstraction for primary allocation must not exceed:
 - (i) ~~180-93~~ litres per second;
 - (ii) ~~927,844~~ 249,091 cubic metres per month;
 - (iii) ~~4,502,162~~ cubic 1,389,990 metres between 1 July in a year and 30 June in the following year.
- (b) The rate of abstraction as first block supplementary allocation must not exceed:
 - (i) ~~80-53~~ litres per second;
- (c) The rate of abstraction as second block supplementary allocation must not exceed:
 - (i) ~~86-44~~ litres per second;
- (d) The total rate of abstraction (primary and supplementary) must not exceed:
 - (i) 4,761,024 465,090 cubic metres per month; and
 - (ii) ~~4,761,024~~ 2,352,490 cubic metres per year.

Commented [KS13]: Based on continuous flow of 93L/sec.

5. No abstraction, other than for stock drinking water purposes, and an individual's domestic supply during the period 1 November to 30 April in the following year must occur when flows in the Luggate Creek are less than the minimum flow of 180 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199).
6. No abstraction, other than for stock drinking water purposes, and an individual's domestic supply during the period 1 May to 30 October in the following year must occur when flows in the Luggate Creek are less than the minimum flow of 500 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199).
7. The first block supplementary take from Luggate Creek must only occur when the flow exceeds 788 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199) and will not cause the flow in Luggate Creek to fall below this level.
8. The second block supplementary take from Luggate Creek must only occur when the flow exceeds 1038 litres per second at the SH6 flow monitoring site (located at map reference NZTM200:1304656 5038199) and will not cause the flow in Luggate Creek to fall below this level.
9. A residual flow of no less than 46 litres per second must be maintained in the Alice Burn immediately downstream of the intake weir (NZTM 2000 E1300149 N5038142) for this permit.

~~10. A fish screen must be designed and installed that meets the following requirements:~~

- ~~(a) Water must only be taken when a fish screen with a mesh size of maximum slot width of 3mm is operated and maintained across the full width of the intake to ensure that fish and fish fry are prevented from passing through the intake screen; and~~
- ~~(b) As far as possible, the screen area must be designed to ensure the calculated average through screen velocity does not exceed 0.12 m/s if a self-cleaning mechanism is in place, or 0.06 m/s if no self-cleaning mechanism is in place.~~
- ~~(c) The sweep velocity parallel to the face of the screen must exceed the design approach velocity.~~

~~Prior to installation of any fish screen, a report containing final design plans and illustrating how the screen will meet the require design criteria and an operation and maintenance plan should be provided to the Consent Authority.~~

~~11. The fish screen required by Condition 9 must be maintained in good working order, to ensure that the screen is performing as designed. Records must be kept of all inspection and maintenance and these should be made available to the Consent Authority, on request.~~

~~10. This permit must be exercised or suspended in accordance with any Consent Authority approved rationing regime that applies to the Luggate Creek catchment.~~

Commented [KS14]: Recommend deleting in accordance with Paragraph 40 Allibone Evidence.

11. The Consent Holder shall exercise the permit in accordance with any established water management group or water allocation committee approved by the Otago Regional Council.

~~12.~~

~~13.~~12. Prior to the exercise of this permit, the consent holder must enter into a low flow agreement or rationing agreement approved by a water management group operating in the Luggate Catchment. The purpose of the agreement is to manage abstractions within the catchment to ensure that the minimum flow is met. The agreement must include (but not be limited to) the following;

- (a) Communications protocol between Luggate Catchment water users for reducing takes to meet minimum flow requirements as flows drop; NB: Priority will be given to providing communal domestic supply first in terms of meeting minimum flow requirements.
- (b) Methodology to be followed by consent holders if the communications protocol cannot be followed;
- (c) Methodology for reviewing process in (a) and (b) above in the event that the minimum flow is breached to avoid the same issue arising again.

~~14.~~13. This permit must be exercised in accordance with the low flow agreement or rationing agreement.

~~15.~~14. The consent holder must review, and if appropriate, update the agreement prepared in accordance with Condition 12, at any intervals not exceeding 2 years from the date of commencement of this consent. If any amendments are made to the low flow agreement a copy of the updated agreement must be provided to the ORC following completion of the review.

Performance Monitoring

- ~~16.~~15. (a) The Consent Holder must install a water meter to record the water take, at the point of take, with an error accuracy range of +/- 5% over the meters nominal flow range, and a telemetry compatible datalogger with at least 24 months data storage and a telemetry unit to record the rate and volume of take, and the date and time this water was taken.
- (b) The data logger must record the date, time and flow in litres per second.
 - (c) Data must be provided once daily to the Consent Authority by means of telemetry. The Consent Holder must ensure data compatibility with the Consent Authority's time series database.
 - (d) The water meter must be installed according to the manufacturer's specifications and instructions. There must be enough space in the pipe to allow for verification of the accuracy of the meter under condition (g).
 - (e) The consent holder must ensure the full operation of the water meter, datalogger and telemetry unit at all times during the exercise of this consent. All malfunctions of the water meter and/or datalogger and/or telemetry unit during the exercise of this consent must be report to the Consent Authority within 5 working days of observation and appropriate repairs must be performed within 5 working days. Once the malfunction has been remedied, a Water Measuring Device Verification Form completed with photographic evidence must be submitted to the Consent Authority within 5 workings days of completion of repairs.

- (f) The installation of the water meter, datalogger and telemetry unit must be completed to full and accurate operation prior to the exercise of the consent. The Consent Holder must forward a copy of the installation certificate to the Consent Authority within one month of installing the water meter datalogger and telemetry unit.
- (g)
 - (i) If a mechanical insert water meter is installed it must be verified for accuracy each and every year from the first exercise of this consent.
 - (ii) Any electromagnetic or ultrasonic flow meter must be verified for accuracy every five years from the first exercise of this consent.
 - (iii) Each verification must be undertaken by a Consent Authority approved operator and a Water Measuring Device Verification Form must be provided to the Consent Authority within 5 working days of the verification being performed, and at any time upon request.

~~17.16.~~ Within 3 years of the commencement of this consent, the Consent Holder must submit to the Consent Authority a Scheme Management Plan. The Scheme Management Plan must include (but not be limited to) the following;

- (a) A plan identifying the irrigation area at the commencement of this consent with the number of hectares specified.
- (b) A plan identifying any expanded irrigation area since the commencement of this consent, with the number of hectares specified.
- ~~(c)~~ A plan identifying further expanded areas of irrigation still to be developed with the number of hectares specified.
- ~~(d)~~ Confirmation of any residential development undertaken within the Command Area and corresponding change in use of water.
- ~~(e)~~ (e) A description of water use efficiency or conveyance upgrade that have taken place since the commencement of this consent including any;
 - (v) Upgrades to existing race network with may include piping;
 - (vi) Establishment of any water storage infrastructure;
- ~~(f)~~ (f) A description of water use efficiency of conveyance upgrades that are planned within the next 3 years.

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~~18.17.~~ The Consent Holder must review and update the plan prepared in accordance with Condition 16 at intervals not exceeding 2 years from the date of implementation of this plan. Any updated plans must be provided to the ORC following completion of the review.

~~19.18.~~ On the 5th-10th Anniversary of the commencement of this consent any expanded areas of irrigation identified within the Scheme Management Plan that have not been developed for irrigation will no longer be able to be developed and the water volume set aside for this future irrigation area must be surrendered by the consent holder.

~~20.~~ A water use efficiency report must be provided to the Consent Authority in June each year. The report must assess the water use over the previous 12 months in respect of the efficient use of water for the purpose consented. This report must include, but not be limited to:

- ~~(a)~~ Area, crop type, number of harvests per year, and timing;
- ~~(b)~~ Annual summary of water usage (month by month, and related to crops in the ground)
- ~~(c)~~ Reasons why use may have varied from the previous year

Commented [KS15]: Recommend delete as purpose of condition is unclear. If required suggest this be incorporated into Condition 16.

- ~~(d) Information demonstrating irrigation equipment that has been used and decision-making regarding efficiency of use (e.g. soil moisture data, irrigation scheduling, meter accuracy checks, computer control of irrigation) and any changes planned for the coming years.~~
- ~~(e) Water conservation steps taken.~~

General

24.19. The consent holder must take all practicable steps to ensure that:

- (a) The volume of water used for irrigation does not exceed soil field capacity of the irrigated areas;
- (b) The irrigation does not cause surface run-off;
- (c) Leakage from pipes and structures is avoided;
- (d) The use of water onto non-targeted areas is avoided;
- (e) Irrigation induced soil erosion and soil pugging does not occur;
- (f) Soil quality is not degraded as a consequence of irrigation; and
- (g) Loss of water, nutrients, and agrichemicals by percolation to groundwater is minimised.

Review

22.20. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within 3 months of each anniversary of the commencement of this consent or within two months of any enforcement action taken by the Consent Authority in relation to the exercise of this consent for the purpose of:

- (a) Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the consent;
- (b) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant plans, and/or the Otago Regional Policy Statement;
- (c) Reviewing the frequency of monitoring or reporting required under this consent;
- (d) Varying the consented quantities and rates of take and monitoring, operating and reporting requirements, and performance requirements to respond to:
 - (i) The results of previous monitoring carried out under this consent and/or;
 - (ii) Water availability, including alternative water sources;
 - (iii) Actual and potential water use
 - (iv) Surface water flow and level regimes;
 - (v) Surface water quality
 - (vi) Efficiency of water use;
 - (vii) Instream biota, including fish passage and the functioning of aquatic ecosystems; or
 - (viii) New requirements for measuring, recording and transmission.

Notes to Consent Holder

1. *Water may be taken at any time for reasonable stock water and domestic supply purposes.*

2. *The Consent Holder must be responsible for obtaining any relevant information on minimum flows in the Luggate Creek to ensure compliance with Conditions 4,5, 6, and 7.*
3. *If you require a replacement consent upon the expiry date of this consent, any new application should be lodged at least 6 months prior to the expiry date of this consent. Applying at least 6 months before the expiry date may enable you to continue to exercise this consent under Section 124 of the Resource Management Act 1991 until a decision is made on the replacement application (and any appeals are determined). Primary allocation may be lost if an application is not made at least 6 months prior to the expiry and will be lost if an application is not made at least 3 months prior to expiry. A late application will likely result in the application being treated as supplementary allocation if any such allocation is available.*
4. *The consent holder must not that Plan Change 6A of the Regional Plan Water, which is now operative, requires the control of farm contaminants in runoff and leaching of nutrients to groundwater. If such discharges are managed such that the thresholds in schedule 16A are no met by 1 April 2020 then consent will be required for the discharge of contaminants. Information about on farm nutrients must also be kept as of May 2014 for providing in puts to OVERSEER which models leaching of nutrients to groundwater. For other information about obligations under Plan Change 6A refer to the ORC website.*
5. *The consent holder is responsible for obtaining all other necessary consents, permits, and licence, including those under the Building Act 2004, the Biosecurity Act 1993, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety in Employment Act 1992). The regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.*