

**BEFORE THE ENVIRONMENT COURT
AT CHRISTCHURCH**

**I MUA I TE KŌTI TAIAO O AOTEAROA
KI ŌTAUTAHI**

Decision No. [2020] NZEnvC 134

IN THE MATTER of the Resource Management Act 1991
AND of an application under section 87G for a
suite of resource consents to replace water
permits to take water from the Lindis River
that expire in 2021
BETWEEN LINDIS CATCHMENT GROUP
INCORPORATED
(ENV-2018-CHC-155)
Applicant
AND OTAGO REGIONAL COUNCIL
Respondent

Court: Environment Judge J R Jackson
Environment Commissioner K A Edmonds
Environment Commissioner R M Bartlett
Hearing: In Chambers at Christchurch
(Final memorandum received 27 July 2020)
Date of Decision: 21 August 2020
Date of Issue: 21 August 2020

SIXTH INTERIM DECISION

A: Subject to Order B, under sections 87G, 104, 104B and 108 of the Resource Management Act 1991, the Environment Court provisionally grants the following water permits to A E and S E Rutherford:

- (1) water permit RM17.301.09A to take primary allocation water from the Lindis River catchment from two take points as follows:



- (a) from take point 13 (Lindis mainstem) as shown in the attached map “Z”;
 - (b) from take point R13 from the Lindis Alluvial Ribbon Aquifer as shown in the attached map “Z”;
- upon the terms and conditions stated in Schedule 1.

- (2) RM17.301.09B to take primary allocation water from Waiwera Creek at take point 14a upon the terms and conditions stated in Schedule 2;
 - (3) RM17.301.23 to take water from Waiwera Creek at take point 14b (as supplementary allocation) upon the terms and conditions stated in Schedule 3.
- B:
- (1) any party that wishes to make submissions on Order A or any other aspect of the terms and conditions of the proposed consents must lodge and serve submissions including any proposed changes by **28 August 2020**;
 - (2) any party that wishes to respond to any document lodged under (1) must do so by **4 September 2020**;
 - (3) the respondent is to lodge and serve a full set of consents as set out in Order A with any necessary changes, corrections or additions to meet the spirit and intent of the Court’s earlier decisions in this proceeding and of the Reasons in this decision by **4 September 2020**;
 - (4) any original party in (1) above may reply to (2) and (3) by **10 September 2020**.

C: Costs are reserved.

REASONS

Introduction: The Point Station

[1] This decision is the sixth in a sequence of interim decisions on an application by the Lindis Catchment Group Incorporated (“LCG”) under section 87G Resource



Management Act 1991 (“the RMA” or “the Act”). The facts, predictions and judgments in the First¹, Second² and Fourth³ Interim Decisions are adopted here.

[2] This decision relates to the Lethbridge/Rutherford property (“The Point Station”) at The Point, Lethbridge Road, Tarras. The Point Station runs up to the crest of the Dunstan Range, and includes the flat area in a loop of the Lindis River known as The Point. The station is 5,465 hectares in total with 460 hectares in irrigation (proposed to increase to 505 hectares). Currently The Point has two sources of water as shown on map X in the Fourth Decision⁴:

- take point 13 from the Lindis River (up to 330 l/s) via “The Point/Rutherford Race”;
- take point 14 from Waiwera Creek (up to 56 l/s), a steep tributary on the eastern side of the Lindis River.

[3] The water take from the Lindis River abstracts water at the northern end of the farm on the river boundary and uses gravity (the station’s own race system from take point 13 on the map attached as “Z”) to reach the irrigated areas of the farm near take point R13 on map Z⁵. The LCG proposal is for a bore and pumped system to be installed closer to the irrigated area of the farm. This will be a more expensive system to run but will result in water being left in the Lindis River for longer. We discussed the benefits of that in the (First) Interim Decision⁶.

2. The proposed consents

[4] The three proposed permits to take are shown in the following tables: Table 6.1 for primary allocations; and Table 6.2 for a supplementary allocation from Waiwera Creek.

¹ [2019] NZEnvC 112.

² [2020] NZEnvC 104.

³ [2020] NZEnvC 121.

⁴ [2020] NZEnvC 121.

⁵ Being a copy of Figure 24 in LCG’s AEE [Environment Court document 0.1].

⁶ [2019] NZEnvC 112.



Table 6.1 Proposed water permits to take primary allocation

Consent number 17.301 suffix	Take point ⁷	Owners as per consent (and farm name where different)	Source (and method of moving water)	Proposed primary allocation (maximum take) (l/s)
.09A ⁸	R13 (replacing 13)	A & S E Rutherford (The Point)	Lindis River Lindis Ribbon Aquifer (Bores)	295
.09B ⁹	14a	A & S E Rutherford (The Point)	Waiwera Creek (direct)	42

Table 6.2 Proposed permit to take supplementary allocation

Consent number 17.301 suffix	Take point	Owners as per consent	Source	Proposed supplementary allocation limit l/s
.23	14b	A & S Rutherford	Waiwera Creek	120

Mainstem and aquifer takes

[5] Proposed consent RM17.301.09A (as renumbered) shifts the takes from take point 13 (Lindis River) to a gallery intake (take point R13) located in the Lindis Alluvial Ribbon Aquifer further downstream as shown on map Z. The exact location of the new point of take will be given once drilling tests have been completed and assessed (and a condition records that the consent holder must advise the Otago Regional Council of the precise location once it has been determined).

[6] The rate of take from take point R13 from the Lindis River will decrease from 381 l/s to 295 l/s. The total annual volume sought for all three takes in Schedules 1 to 3 is 4,090,500 m³.

Waiwera Creek

[7] A primary allocation of 42 l/s is sought from the Waiwera Creek from take point 14a.

[8] Consent RM17.301.23 is for a take of 120 l/s of supplementary allocation water from Waiwera Creek (at the same point of take, i.e. take point 14b). That is applied for because the Rutherfords are considering the development of a storage dam to enable

⁷ S A Dicey affidavit 2 August 2019 Exhibit SAD-1 column 4 (Environment Court document 77).

⁸ Previously .09A and B, renumbered as discussed below.

⁹ Previously .09C, renumbered as discussed below,



water harvesting at higher flows from the Waiwera Creek. This does not increase the maximum annual volume sought by The Point, but does allow some flexibility in when it may be taken, and used.

3. Resolving the issues

3.1 What are the issues?

[9] We now traverse the issues that arise from consideration of the proposed consents in the light of the First, Second and Fourth Decisions. We note that the general conditions have now been settled as a result of the Second and Fourth Decisions. The first question is “should the take from the primary allocation be one combined, or two or three separate, resource consents”? and various issues arise in relation to that. The second set of questions is “should any one or more water permits have special conditions and, if so, what”?

3.2 Primary allocation from Lindis River and the aquifer

[10] RM17.301.09, as put forward by the LCG, proposes to take primary allocation water from three take points some kilometres apart as shown on map X to the Fourth Decision¹⁰. We were somewhat concerned by this mixing of three apparently separate takes initially but on reflection consider two are appropriate. Two takes are of primary allocation from the Lindis River and/or the aquifer and they are related in several ways:

- (1) the total instantaneous take is limited to the cumulative total of 295 l/s;
- (2) the water taken from take point 13 race is to be replaced over 5 years with water to be taken from a bore in the vicinity of R13;
- (3) the maximum annual volume is for all three take points and all consents;
- (4) the consent holder is to improve the technical efficiency of its water use over time. We recommend the appropriate condition below.

Commencement

[11] The reason for having two take points for the water from the mainstem/Lindis Alluvial Ribbon Aquifer is that there are some practical complexities in moving from the

¹⁰ [2020] NZEnvC 121.



existing race system (with takes direct from the river) to the new water delivery system that largely relies on takes from bores or “galleries”. It was the evidence for LCG and the ORC that the retirement of the races and the implementation of the replacement galleries as part of a Flow Management Plan (“FMP”), is likely to be an incremental process. Counsel advise that the sequence and timing of that process will be determined by many factors including¹¹:

- (a) the availability of infrastructure and such things as physical and legal access and an electricity supply;
- (b) the ... financial situation of each permit holder;
- (c) the timing and nature of any irrigation development within the irrigation area of each permit holder.

That was put generally but applies to The Point Station (with its own race) too.

[12] Counsel submit¹² that this means that neither LCG (nor the court) can safely predict what the future commencement date for the consents should be under section 116(4). All we know is that they must be exercised within five years of 1 October 2021 (assuming the appeals to the High Court are determined before then). For this reason, LCG submits that the best course of action is for provision to be made within each permit to manage the transition process¹³. That is the basis on which the draft permits appended to Dr Cowie’s section 87F report were structured and both the ORC and LCG remain content with that¹⁴.

[13] The LCG and the ORC have suggested that commencement of these permits be deferred until 1 October 2021 in which case a surrender provision is unnecessary¹⁵. We accept that and will amend the draft conditions by removing the surrender conditions accordingly.

[14] We consider that the mainstem/aquifer takes should be treated as one take. That avoids the problem where, if they were separate, the consent holder could apply to extend the (new) take from the Lindis River mainstem as late as 31 March 2026, more than six months out from 1 October 2026. A temporary roll-over under section 124 RMA would

¹¹ Submissions for ORC and LCG dated 17 February 2020 [10].

¹² Submissions for ORC and LCG dated 17 February 2020 [11].

¹³ Submissions for ORC and LCG dated 17 February 2020 [11].

¹⁴ Submissions for ORC and LCG dated 17 February 2020 [11].

¹⁵ Submissions for ORC and LCG dated 17 February 2020 [12].



apply to RM17.301.09A which would negate LCG's scheme. Accordingly we consider it is appropriate to treat the taking of water from take points 13 and R13 as sequential parts of the same consent which we will call "RM17.301.09A".

3.3 Waiwera Creek

[15] Because the proposed primary allocation take of 42 l/s from Waiwera Creek is from a different sub-catchment of the Lindis River ("The tributaries") we consider it should be a separate consent even if it is linked to the mainstem/aquifer take. Accordingly we will approve a separate consent which will now be RM17.301.09B (renumbered from RM17.301.09C).

[16] The other take permit (.23) is also for a separate allocation from a different sub-catchment (the tributaries of the Lindis River) and should be treated as a separate water permit.

3.4 Special conditions

[17] The mainstem take should be screened while it continues to operate. We adopt the conclusions in the Fourth Decision¹⁶ as to the appropriate fish screen condition for a main stem take and will include that in RM17.301.09A. There is no need for a fish screen in Waiwera Creek since there are no fish present¹⁷.

[18] There are two other required special conditions that we can recall (if there are more we rely on the respondent to add them under Order B(3) above).

[19] First, since take point R13 has not yet been finally established condition 1 in RM17.301.09A should have added to it:

Once the precise location of the relevant take is identified and confirmed the consent holder must notify the Consent Authority in writing of the location of that take including a description of the location, map reference and legal description of the point of take within 20 working days.

¹⁶

[2020] NZEnvC 121 at [27].

¹⁷

M A Hickey affidavit 24 July 2020 at [14] [Environment Court document 91].



[20] The second relates to condition 2 "Irrigation Command Area". That should be renamed "Irrigation Command Area and water use". Conditions 2.2 and 2.3 should be added to each of the three consents, to read as follows (with the other consent numbers added in each case):

2.2 Within 10 years of this consent commencing in combination with RM17.301.X and RM17.301.Y not more than 125 hectares of land on the property may be irrigated by either border-dyke or overland flow methods;

2.3 The consent holder must submit a farm irrigation plan to the Consent Authority within 10 years of this consent commencing showing all areas of irrigation.

4. Result

[21] We will provisionally approve water permits in the form attached but reserve leave for submissions on them.

For the Court:



J R Jackson
Environment Judge



Attachments:

Map "Z"

Schedule 1: RM17.301.09A

Schedule 2: RM17.301.09B

Schedule 3: RM17.301.23

"2"

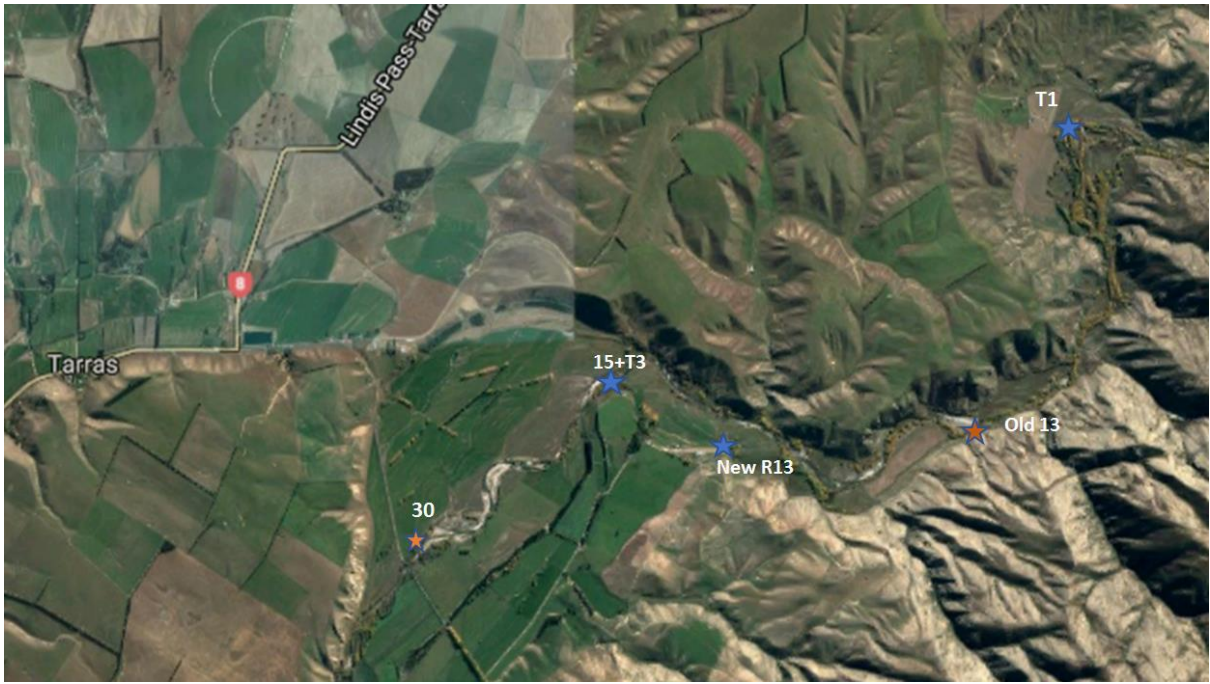


Figure 24: Site of Proposed bores/gallery intakes R13 and T3



WATER PERMIT

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

Name: Alastair Askin Rutherford and Suzanne Elizabeth Rutherford

Address: The Point, RD 3, Cromwell, 9383 NZ

To take and use water from the Lindis River and the Lindis Alluvial Ribbon Aquifer as **primary** allocation for the purpose of irrigation, storage and hydro-electricity generation upon the conditions set out below.

For a term expiring 1 October 2056, being 35 years from 2 October 2021 ("the commencement date") from the following:

Points of Abstraction:

Locations:

Lindis River: approximately 3,800 metres north east of the intersection of Ardgour Road and Lethbridge Road, Ardgour.

Lindis Alluvial Ribbon Aquifer: approximately 2,480 metres north east of the intersection of Ardgour Road and Lethbridge Road, Ardgour.

Legal Description:

Run 236U

Sec 3 Blk XV Tarras SD, Sec 1 Blk XVII Tarras SD, Sec 2 Blk IX Cluden SD and Sec 1 BLK XIII Cluden SD, Sec 6 Blk XV Tarras SD, Sec 1 SO Plan 24078

Map References:

Lindis River:
NZTM 2000 E1322752 N5028693

Lindis Alluvial Ribbon Aquifer:
NZTM 2000 Within a 200 metre radius of E1321157 N5028581

Legal Description of land(s) where water is to be used: PT Sec 3 BLK XV Tarras SD Sec 2 BLK IX Cluden SD Run 236U (and see the command area described below).

CONDITIONS

Terms of take and use

1. Taking of primary allocation of water

This consent authorises the taking of water from the Lindis River for the purposes of irrigation for a term expiring five years after the commencement of this consent on the following conditions:



- a. the rate of abstraction must not exceed 295 litres per second;
 - b. in combination with this consent, RM17.301.9B and RM17.301.23 the annual volume of water taken during the period 1 July to 30 June of the following year inclusive must not exceed 4,090,500 cubic metres.
- 1.2 This consent authorises the taking of water from the Lindis Ribbon Alluvial Aquifer for the purposes of irrigation for a term expiring 35 years after the commencement of this consent on the following conditions:
- a. the rate of abstraction must not exceed 295 litres per second;
 - b. this groundwater take must not be exercised at the same time as the direct take of water from the Lindis River authorised by condition 1.1 above.
- 1.3 The consent holder must not abstract water when the flow in the Lindis River at the Otago Regional Council's Ardgour Road flow recording site (located at NZTM 2000 1314455 N5023467) is less than the minimum flow of 1,600 litres per second during the months of June to September inclusive.
- 1.4 From the fifth anniversary of the commencement of this consent the consent holder must not abstract water when the flow in the Lindis River at the Otago Regional Council's Ardgour Road flow recording site (located at NZTM 2000 1314455 N5023467) is less than the minimum flow of 550 litres per second during the months of October to May of the following year inclusive.
- 1.5 Once the precise location of the relevant take is identified and confirmed the consent holder must notify the Consent Authority in writing of the location of that take including a description of the location, map reference and legal description of the point of take within 20 working days.

2. Irrigation Command Area and water use

- 2.1 The area irrigated with water taken under this consent, RM17.301.09B and RM17.301.23 must not exceed 505 hectares, and must be within the command area shown in the map attached as Appendix 1.
- 2.2 Within 10 years of this consent commencing in combination with RM17.301.09B and RM17.301.23 not more than 125 hectares of land on the property may be irrigated by either border-dyke or overland flow methods.
- 2.3 The consent holder must submit a farm irrigation plan to the Consent Authority within 10 years of this consent commencing showing all areas of irrigation.

General conditions

3. Recording and reporting

- 3.1 All taking of water must be recorded and reported in accordance with conditions 3.2 and 3.3 below at the consent holder's expense.
- 3.2 a. The consent holder must maintain a water measuring station comprising of:
- i. a meter to record the water takes, within an error accuracy range of +/- 5% for a piped system; or +/- 10% for an open channel system, over the meter's nominal flow range; and
 - ii. a telemetry compatible datalogger with at least 12 months data storage;



and

- iii a telemetry unit to record the rate and volume of take, and the date and time this water was taken.
 - b. The water measuring station must be installed as close as is practicable to the point or points of take.
 - c. The consent holder must ensure the full operation of the water measuring stations at all times during the exercise of this consent.
 - d. The installation of the water measuring stations must be completed to full and accurate operation prior to the first exercise of this consent.
 - e. The water measuring stations must be calibrated by a suitably qualified operator applying International Standards methodology at least annually. Calibration documents must be supplied to the Consent Authority within 5 working days of the verification being performed, and upon request.
 - f. Where there is a malfunction of the water measuring station, appropriate repairs must be performed within 15 working days or as soon as is reasonably practicable.
- 3.3
- a. The consent holder must complete (as applicable):
 - i the Open Channel Water Measuring Device Installation, Commissioning and Verification form for open channel takes; and/or
 - ii the Piped Takes, Water Meter, Datalogger Installation, Commissioning and Verification forms for piped takes; andmust submit them to the Consent Authority within 5 working days of the completion of installation and verification of the water measuring device and datalogger.
 - b. 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.
 - c. All malfunctions of the water measuring station during the exercise of this consent must be reported to the Consent Authority within 5 working days of observation.
 - d. Once the malfunction has been remedied, the applicable form specified in condition 3.3 a. of this condition must be completed and submitted with photographic evidence to the Consent Authority within 5 working days of the completion of repairs.
- 3.4 The water measuring station, datalogger and telemetry unit must be safely accessible by the Consent Authority and its contractors at all times.

4. Flow pulse

- 4.1 If at any time after the fifth anniversary of the commencement of this consent Lindis River flow as measured at the Otago Regional Council's Ardgour Road Flow Recorder is equal to or below 700 litres per second for 14 consecutive days, or if the flow is equal to or below 900 litres per second for 21 consecutive days, then the consent holder must in accordance with the directions of the Water Management Group, reduce abstraction from the Lindis catchment on a collective basis with all other members of the Water Management Group, to provide for the following:
- a. a flow of at least 1,000 litres per second at the Ardgour Road Flow Recorder for a period of at least 15 consecutive hours, with the initial flow peak at the Ardgour Road Flow Recorder timed to occur between 3pm and 6pm; or
 - b. if a flow of 1,000 litres per second cannot be attained at the Ardgour Road Flow Recorder due to low inflows at the Otago Regional Council's Lindis Peak Flow Recorder, then no water must be taken from the main stem of the Lindis River for at least 15 consecutive hours, with the initial flow peak at the Ardgour Road Flow



Recorder timed to occur between 3pm and 6pm.

5. Water Management Group (agreed condition under section 108AA(1)(a) RMA)

- 5.1 The consent holder must be a member of a Water Management Group for the Lindis catchment.
- 5.2 From the fifth anniversary of the commencement of this consent the consent holder must exercise this consent in accordance with a Flow Management Plan for the Lindis catchment which:
- has been prepared by the Water Management Group for the Lindis catchment; and
 - contains the matters in condition 6 attached to and forming part of this consent; and
 - has been certified by the Consent Authority as containing the matters required by condition 6; and
 - is implemented by the Water Management Group for the Lindis catchment.
- 5.3 The consent holder must not exercise this consent if:
- there is no Water Management Group for the Lindis catchment; and
 - from the fifth anniversary of the commencement of this consent there is no certified Flow Management Plan.

6. Requirements for the Flow Management Plan

- 6.1 From the fifth anniversary of the commencement of this consent the consent holder must exercise this consent in accordance with a Flow Management Plan ("FMP") for the Lindis catchment which:
- has been prepared by the Water Management Group for the Lindis catchment; and
 - must achieve the objectives stated in 6.2 below and the hydrological outcomes in 6.4 and 6.5; and
 - have been certified by the Consent Authority as containing the matters listed in 6.3 below; and
 - is implemented and overseen by the Water Management Group for the Lindis catchment.
- 6.2 The objectives of the FMP are:
- to minimise the frequency and duration of flows less than 600 litres per second at the Otago Regional Council's Ardgour Road Flow Recorder during the months of October to May inclusive;
 - to limit the length of the Lindis River affected by low flows;
 - to manage the taking of supplementary allocation water;
 - to provide the opportunity for a catchment-based approach that promotes flexibility between users for better water management, particularly during times of water shortage; and
 - to confirm that the Lindis Catchment Group scheme¹ once implemented does result in the hydrological and ecological outcomes predicted.
- 6.3 To achieve these objectives the FMP must specify at least:

¹ By this is meant closing the existing Tarras, Ardgour, Rutherfords and Beggs-Stacpoole raceways, changing a number of water takes to bores or galleries as provided for in RM17.301.07, and providing a minimum flow of at least 550 litres per second at the Ardgour Road Flow Recorder.



- a. how the instantaneous rate of take from the main stem of the Lindis River will be progressively reduced when flows recede below 1,600 litres per second at the Lindis Peak Flow Recorder;
- b. how takes will be rationed from the main stem of the Lindis River in advance of flows lower than 1,000 litres per second occurring at the Ardgour Road Flow Recorder;
- c. how takes from the main stem of the Lindis River will be managed to ensure that the minimum flow of 550 litres per second at the Ardgour Road Flow Recorder is met at all times;
- d. how condition 6.2 will be implemented;
- e. how the supplementary allocation will be managed to ensure minimum flow requirements and allocation limits are met at all times;
- f. how the primary allocations to the three reaches of the river and the tributaries (as introduced by plan change 5A) are to be managed, taking the following as a starting point:
 - i. 132 litres per second above the Lindis Peak Flow Recorder;
 - ii. 265 litres per second from the tributaries below the Lindis Peak Flow Recorder;
 - iii. 1,104 litres per second from the mainstem of the Lindis River between the Lindis Peak and Ardgour Road Flow Recorders, including takes from the Lindis Alluvial Ribbon Aquifer;
 - iv. 138 litres per second from groundwater takes below the Ardgour Road Flow Recorder site.
- g. how the flow pulse conditions of the consent will be implemented, monitored and reported to the Consent Authority. To meet this requirement the Flow Management Plan must include provision for:
 - i. recording the magnitude, duration and timing of the flow pulse; and
 - ii. on at least three occasions in the first six times the flow pulse occurs, ascertaining the extent to which the flow pulse facilitated the out-migration of young trout to the Clutha/Mata Au; and
 - iii. the methodologies used for (i) and (ii); and
 - iv. opportunities for the Otago Fish and Game Council, if it wishes, to comment on the methodologies, participate in the monitoring and receiving the monitoring report; and
 - v. reporting the results to the Consent Authority within 30 working days; the report to include:
 - 1. an assessment of the efficacy of the flow pulse in facilitating the out-migration of young trout to the Clutha/Mata Au; and
 - 2. any suggested changes to the flow pulse condition, and
 - 3. copies of any correspondence with Otago Fish and Game.
- h. how the hydrological outcome of the scheme will be monitored against hydrological predictions. Monitoring will include:
 - a. continuous flow recording at the Lindis Peak Flow Recorder;
 - b. continuous flow recording at the Ardgour Road Flow Recorder;
 - c. continuous monitoring of all water takes authorised by these consents;
- i. how, once the scheme is implemented, any changes, if needed, would be made to ensure that the hydrological outcomes predicted by modelling can be achieved.



- 6.4 From the fifth anniversary of the commencement of this consent the hydrological outcomes expected at Ardour Road Flow Recorder based on the modelling predictions for all primary allocation takes in the Lindis catchment are:
- a. flows will exceed 550 litres per second at all times during the irrigation season (October-May inclusive);
 - b. flows will not fall below 700 litres per second for more than 14 consecutive days during the irrigation season;
 - c. flows will exceed 1,600 litres per second at all times during the months of June to September inclusive, unless the river falls below this flow naturally;
 - d. on average flows will exceed 1,000 litres per second 70% of the time during the irrigation season over the full term of the consent;
 - e. on average flows will exceed 2,000 litres per second 40% of the time during the irrigation season over the full term of the consent.
- 6.5 The FMP must ensure that there will be a continuous surface flow at the confluence of the Lindis River with the Clutha River/Mata Au at all times.

7. General

- 7.1 The consent holder must take all practicable steps to ensure that:
- a. there is no leakage from pipes and structures; and
 - b. there is no run off of irrigation water in irrigated areas either on site or off site; and
 - c. contaminants are prevented from being drawn into the source of the water by backflow.

8. Review

- 8.1 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 for the purpose of:
- a. adjusting the consented rate or volume of water under condition 1, should monitoring under condition 3 or future changes in water use indicate that the consented rate or volume is not being or not able to be fully utilised; or
 - b. reviewing condition 4 of this consent for the purpose of facilitating the out-migration of juvenile trout from the Lindis River; or
 - c. determining whether the conditions of this consent (including the special conditions (if any)) 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
 - d. adjusting or altering the method of water take data recording and transmission;
 - e. making such changes as are needed to ensure that the hydrological outcomes set out in condition 6.4 are achieved.

Special conditions

9. Fish Screens

- 9.1 Any surface water intake must be screened with fish screens that are designed in accordance with Appendix 2 attached to and forming part of this consent.



- 9.2 Before installation of any fish screen, the consent holder must submit a report to the Consent Authority containing the design plans and specifications for the screen and its installation and the operation and maintenance plan for the screen, together with a letter from a suitably qualified person with expertise in fish screen design, certifying that the screen meets the requirements of Appendix 2 of this consent.
- 9.3 Within 12 months of fish screen installation a certificate must be provided to the Consent Authority, by a suitably qualified person with expertise in fish screen design, to certify that the design plans and operation and maintenance plan for the fish screen meet the performance criteria as specified in Appendix 2 of this consent and that the fish screen has been installed in accordance with the details provided to the Consent Authority in accordance with condition 9.2.
- 9.4 The intake structures and fish screen:
- a. must be operated in accordance with the operation and maintenance plan established by conditions 9.2 and 9.3; and
 - b. must be regularly inspected and maintained in good working order at all times.
- 9.5 A record must be kept of all inspections and maintenance carried out and provided to the Consent Authority on request.

Notes to Consent Holder

1. *Water may be taken at any time for reasonable domestic or stock water purposes.*
2. *If you require a replacement water permit upon the expiry date of this water permit, any new application should be lodged at least 6 months prior to the expiry date of this water permit. Applying at least 6 months before the expiry date may enable you to continue to exercise this permit until a decision is made on the replacement application. Failure to apply at least 3 months in advance of the expiry date may result in any primary allocation status being lost. A late application may result in the application being treated as supplementary allocation if any such allocation is available.*

Issued at Dunedin this day of

Joanna Gilroy
Manager Consents

Appendices

Appendix 1: Irrigation Command Area

Appendix 2: Design of Fish Screens



Appendix 2: Design of Fish Screens

The fish screen must be designed with the following features:

- a. The site is located as close to the point of take as practicable;
- b. The approach velocity is less than 0.12 m/s;
- c. Water velocity across (or past) the screen (“sweep velocity”) is greater than the approach velocity (b);
- d. A bypass system is provided to take entrained fish away from the intake and back into the source channel, or into water which allows the fish back into the source channel;
- e. Screening material (mesh, profile bars or other) on the screen needs to have a smooth surface and openings;
- f. For the purposes of measurement and compliance, the approach velocity is considered to be the velocity present 7.62cm in front of, and perpendicular to the screen face; and
- g. Screen mesh or slot size must be no greater than 3mm and the mesh must completely cover the water take channel or pipe.



Consent No. RM17.301.09B

WATER PERMIT

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

Name: Alastair Askin Rutherford and Suzanne Elizabeth Rutherford

Address: The Point, RD 3, Cromwell 9383 NZ

To take and use water from Waiwera Creek as primary allocation for the purpose of irrigation, storage and hydro-electricity generation upon the conditions set out below.

For a term expiring 1 October 2056, being 35 years from 2 October 2021 ("the commencement date") from the following:

Point of Abstraction:

Location: Waiwera Creek: approximately 4,270 metres east of the intersection of Ardgour and Ruffell Road, Ardgour

Legal Description: Run 236U
Sec 3 Blk XV Tarras SD, Sec 1 Blk XVII Tarras SD,
Sec 2 Blk IX Cluden SD and Sec 1 BLK XIII Cluden
SD, Sec 6 Blk XV Tarras SD, Sec 1 SO Plan 24078

Map Reference: NZTM 2000 E1322655 N5024990

Legal Description of land(s) where water is to be used: PT Sec 3 BLK XV Tarras SD Sec 2 BLK IX Cluden SD Run 236U (and see the command area described below).

CONDITIONS

Terms of take and use

1. Taking of primary allocation of water

1.1 This consent authorises the taking of up to 42 litres per second from the Waiwera Creek for a term expiring 35 years from the date of commencement of this consent for the purposes of irrigation, storage and associated hydro-electric power generation subject to the following conditions:

- a. in combination with this consent, RM17.301.09A and RM17.301.23 the annual volume of water taken during the period 1 July to 30 June of the following year inclusive must not exceed 4,090,500 cubic metres.
- b. The consent holder must not take water from Waiwera Creek unless there is a visible surface flow between the point of take and the culvert under Ardgour Road.

1.2 From the fifth anniversary of the commencement of this consent the consent holder must not abstract water when the flow in the Lindis River at the Otago Regional Council's Ardgour Road flow recording site (located at NZTM 2000 1314455 N5023467) is less than the minimum flow of 550 litres per second during the months of October to May of the following year inclusive.



1.3 The consent holder must not abstract water when the flow in the Lindis River at the Otago Regional Council's Ardgour Road flow recording site (located at NZTM 2000 1314455 N5023467) is less than the minimum flow of 1,600 litres per second during the months of June to September inclusive.

2. Irrigation Command Area and water use

2.1 The area irrigated with water taken under this consent, RM17.301.09A and RM17.301.23 must not exceed 505 hectares, and must be within the command area shown in the map attached as Appendix 1.

2.2 Within 10 years of this consent commencing in combination with RM17.301.09A and RM17.301.23 not more than 125 hectares of land on the property may be irrigated by either border-dyke or overland flow methods.

2.3 The consent holder must submit a farm irrigation plan to the Consent Authority within 10 years of this consent commencing showing all areas of irrigation.

General conditions

3. Recording and reporting

3.1 All taking of water must be recorded and reported in accordance with conditions 3.2 and 3.3 below at the consent holder's expense.

- 3.2 a. The consent holder must maintain a water measuring station comprising of:
- i. a meter to record the water takes, within an error accuracy range of +/- 5% for a piped system; or +/- 10% for an open channel system, over the meter's nominal flow range; and
 - ii. a telemetry compatible datalogger with at least 12 months data storage; and
 - iii. a telemetry unit to record the rate and volume of take, and the date and time this water was taken.
- b. The water measuring station must be installed as close as is practicable to the point or points of take.
- c. The consent holder must ensure the full operation of the water measuring stations at all times during the exercise of this consent.
- d. The installation of the water measuring stations must be completed to full and accurate operation prior to the first exercise of this consent.
- e. The water measuring stations must be calibrated by a suitably qualified operator applying International Standards methodology at least annually. Calibration documents must be supplied to the Consent Authority within 5 working days of the verification being performed, and upon request.
- f. Where there is a malfunction of the water measuring station, appropriate repairs must be performed within 15 working days or as soon as is reasonably practicable.
- 3.3 a. The consent holder must complete (as applicable):
- i. the Open Channel Water Measuring Device Installation, Commissioning and Verification form for open channel takes; and/or
 - ii. the Piped Takes, Water Meter, Datalogger Installation, Commissioning and Verification forms for piped takes; and
- must submit them to the Consent Authority within 5 working days of the



- completion of installation and verification of the water measuring device and datalogger.
- b. 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.
 - c. All malfunctions of the water measuring station during the exercise of this consent must be reported to the Consent Authority within 5 working days of observation.
 - d. Once the malfunction has been remedied, the applicable form specified in condition 3.3 a. of this condition must be completed and submitted with photographic evidence to the Consent Authority within 5 working days of the completion of repairs.
- 3.4 The water measuring station, datalogger and telemetry unit must be safely accessible by the Consent Authority and its contractors at all times.

4. Flow pulse

- 4.1 If at any time after the fifth anniversary of the commencement of this consent Lindis River flow as measured at the Otago Regional Council's Ardgour Road Flow Recorder is equal to or below 700 litres per second for 14 consecutive days, or if the flow is equal to or below 900 litres per second for 21 consecutive days, then the consent holder must in accordance with the directions of the Water Management Group, reduce abstraction from the Lindis catchment on a collective basis with all other members of the Water Management Group, to provide for the following:
- a. a flow of at least 1,000 litres per second at the Ardgour Road Flow Recorder for a period of at least 15 consecutive hours, with the initial flow peak at the Ardgour Road Flow Recorder timed to occur between 3pm and 6pm; or
 - b. if a flow of 1,000 litres per second cannot be attained at the Ardgour Road Flow Recorder due to low inflows at the Otago Regional Council's Lindis Peak Flow Recorder, then no water must be taken from the main stem of the Lindis River for at least 15 consecutive hours, with the initial flow peak at the Ardgour Road Flow Recorder timed to occur between 3pm and 6pm.

5. Water Management Group (agreed condition under section 108AA(1)(a) RMA)

- 5.1 The consent holder must be a member of a Water Management Group for the Lindis catchment.
- 5.2 From the fifth anniversary of the commencement of this consent the consent holder must exercise this consent in accordance with a Flow Management Plan for the Lindis catchment which:
- a. has been prepared by the Water Management Group for the Lindis catchment; and
 - b. contains the matters in condition 6 attached to and forming part of this consent; and
 - c. has been certified by the Consent Authority as containing the matters required by condition 6; and
 - d. is implemented by the Water Management Group for the Lindis catchment.
- 5.3 The consent holder must not exercise this consent if:
- a. there is no Water Management Group for the Lindis catchment; and
 - b. from the fifth anniversary of the commencement of this consent there is no certified Flow Management Plan.



6. Requirements for the Flow Management Plan

6.1 From the fifth anniversary of the commencement of this consent the consent holder must exercise this consent in accordance with a Flow Management Plan ("FMP") for the Lindis catchment which:

- a. has been prepared by the Water Management Group for the Lindis catchment; and
- b. must achieve the objectives stated in 6.2 below and the hydrological outcomes in 6.4 and 6.5; and
- c. have been certified by the Consent Authority as containing the matters listed in 6.3 below; and
- d. is implemented and overseen by the Water Management Group for the Lindis catchment.

6.2 The objectives of the FMP are:

- a. to minimise the frequency and duration of flows less than 600 litres per second at the Otago Regional Council's Ardour Road Flow Recorder during the months of October to May inclusive;
- b. to limit the length of the Lindis River affected by low flows;
- c. to manage the taking of supplementary allocation water;
- d. to provide the opportunity for a catchment-based approach that promotes flexibility between users for better water management, particularly during times of water shortage; and
- e. to confirm that the Lindis Catchment Group scheme¹ once implemented does result in the hydrological and ecological outcomes predicted.

6.3 To achieve these objectives the FMP must specify at least:

- a. how the instantaneous rate of take from the main stem of the Lindis River will be progressively reduced when flows recede below 1,600 litres per second at the Lindis Peak Flow Recorder;
- b. how takes will be rationed from the main stem of the Lindis River in advance of flows lower than 1,000 litres per second occurring at the Ardour Road Flow Recorder;
- c. how takes from the main stem of the Lindis River will be managed to ensure that the minimum flow of 550 litres per second at the Ardour Road Flow Recorder is met at all times;
- d. how condition 6.2 will be implemented;
- e. how the supplementary allocation will be managed to ensure minimum flow requirements and allocation limits are met at all times;
- f. how the primary allocations to the three reaches of the river and the tributaries (as introduced by plan change 5A) are to be managed, taking the following as a starting point:
 - i. 132 litres per second above the Lindis Peak Flow Recorder;
 - ii. 265 litres per second from the tributaries below the Lindis Peak Flow Recorder;
 - iii. 1,104 litres per second from the mainstem of the Lindis River between the Lindis Peak and Ardour Road Flow Recorders, including takes from the Lindis Alluvial Ribbon Aquifer;

¹ By this is meant closing the existing Tarras, Ardour, Rutherford and Beggs-Stacpoole raceways, changing a number of water takes to bores or galleries as provided for in RM17.301.07, and providing a minimum flow of at least 550 litres per second at the Ardour Road Flow Recorder.



- iv. 138 litres per second from groundwater takes below the Ardgour Road Flow Recorder site.
- g. how the flow pulse conditions of the consent will be implemented, monitored and reported to the Consent Authority. To meet this requirement the Flow Management Plan must include provision for:
 - i. recording the magnitude, duration and timing of the flow pulse; and
 - ii. on at least three occasions in the first six times the flow pulse occurs, ascertaining the extent to which the flow pulse facilitated the out-migration of young trout to the Clutha/Mata Au; and
 - iii. the methodologies used for (i) and (ii); and
 - iv. opportunities for the Otago Fish and Game Council, if it wishes, to comment on the methodologies, participate in the monitoring and receiving the monitoring report; and
 - v. reporting the results to the Consent Authority within 30 working days; the report to include:
 - 1. an assessment of the efficacy of the flow pulse in facilitating the out-migration of young trout to the Clutha/Mata Au; and
 - 2. any suggested changes to the flow pulse condition, and
 - 3. copies of any correspondence with Otago Fish and Game.
- h. how the hydrological outcome of the scheme will be monitored against hydrological predictions. Monitoring will include:
 - a. continuous flow recording at the Lindis Peak Flow Recorder;
 - b. continuous flow recording at the Ardgour Road Flow Recorder;
 - c. continuous monitoring of all water takes authorised by these consents;
- i. how, once the scheme is implemented, any changes, if needed, would be made to ensure that the hydrological outcomes predicted by modelling can be achieved.

- 6.4 From the fifth anniversary of the commencement of this consent the hydrological outcomes expected at Ardgour Road Flow Recorder based on the modelling predictions for all primary allocation takes in the Lindis catchment are:
- a. flows will exceed 550 litres per second at all times during the irrigation season (October-May inclusive);
 - b. flows will not fall below 700 litres per second for more than 14 consecutive days during the irrigation season;
 - c. flows will exceed 1,600 litres per second at all times during the months of June to September inclusive, unless the river falls below this flow naturally;
 - d. on average flows will exceed 1,000 litres per second 70% of the time during the irrigation season over the full term of the consent;
 - e. on average flows will exceed 2,000 litres per second 40% of the time during the irrigation season over the full term of the consent.

- 6.5 The FMP must ensure that there will be a continuous surface flow at the confluence of the Lindis River with the Clutha River/Mata Au at all times.

General

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



- a. there is no leakage from pipes and structures; and
- b. there is no run off of irrigation water in irrigated areas either on site or off site; and
- c. contaminants are prevented from being drawn into the source of the water by backflow.

8. Review

- 8.1 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 for the purpose of:
- a. adjusting the consented rate or volume of water under condition 1, should monitoring under condition 3 or future changes in water use indicate that the consented rate or volume is not being or not able to be fully utilised; or
 - b. reviewing condition 4 of this consent for the purpose of facilitating the out-migration of juvenile trout from the Lindis River; or
 - c. determining whether the conditions of this consent (including the special conditions (if any)) 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
 - d. adjusting or altering the method of water take data recording and transmission;
 - e. making such changes as are needed to ensure that the hydrological outcomes set out in condition 6.4 are achieved.

Notes to Consent Holder

1. *Water may be taken at any time for reasonable domestic or stock water purposes.*
2. *If you require a replacement water permit upon the expiry date of this water permit, any new application should be lodged at least 6 months prior to the expiry date of this water permit. Applying at least 6 months before the expiry date may enable you to continue to exercise this permit until a decision is made on the replacement application. Failure to apply at least 3 months in advance of the expiry date may result in any primary allocation status being lost. A late application may result in the application being treated as supplementary allocation if any such allocation is available.*

Issued at Dunedin this day of

Joanna Gilroy
Manager Consents

Appendix 1: Irrigation Command Area



Consent No. RM17.301.23

WATER PERMIT

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

Name: Alastair Askin Rutherford and Suzanne Elizabeth Rutherford

Address: c/- Checketts McKay, PO Box 268, Cromwell 9342 NZ

To take and use water from Waiwera Creek as **supplementary** allocation for the purpose of irrigation, storage and hydro-electricity generation upon the conditions set out below.

For a term expiring 1 October 2056, being 35 years from 2 October 2021 ("the commencement date") from the following:

Point of Abstraction:

Location: Waiwera Creek: approximately 4,270 metres east of the intersection of Ardgour and Ruffell Road, Ardgour

Legal Description: Run 236U
Sec 3 Blk XV Tarras SD, Sec 1 Blk XVII Tarras SD,
Sec 2 Blk IX Cluden SD and Sec 1 BLK XIII Cluden
SD, Sec 6 Blk XV Tarras SD, Sec 1 SO Plan 24078

Map Reference: NZTM 2000 E1322655 N5024990

Legal Description of land(s) where water is to be used: PT Sec 3 BLK XV Tarras SD Sec 2 BLK IX Cluden SD Run 236U (and see the command area described below).

CONDITIONS

Take and use

1. Taking of supplementary allocation of water

1.1 This consent authorises the taking of up to 120 litres per second from Waiwera Creek for a term expiring 35 years from the date of commencement of this consent for the purposes of irrigation and associated hydro-electric power generation subject to the following conditions:

- a. In combination with this consent, RM17.301.09A and RM17.301.09B the annual volume of water taken during the period 1 July to 30 June of the following year inclusive must not exceed 4,090,500 cubic metres.
- b. The consent holder must not take water from Waiwera Creek unless there is a residual flow that is a visible surface flow from the point of take to the Ardgour Road culvert.
- c. The consent holder must not abstract water when the flow in the Lindis River at the Otago Regional Council's Ardgour Road flow recording site (located at NZTM 2000 1314455 N5023467) is less than the minimum flow of 1,600 litres per second from 1 December to 30 April and 2,200 litres per second from 1 May to 30 November.



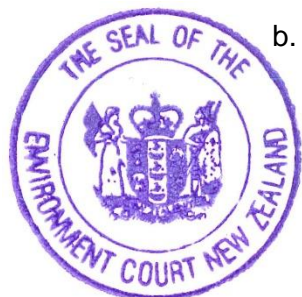
2. Irrigation Command Area and water use

- 2.1 The area irrigated with water taken under this consent, RM17.301.09A and RM17.301.09B must not exceed 505 hectares, and must be within the command area shown in the map attached as Appendix 1.
- 2.2 Within 10 years of this consent commencing in combination with RM17.301.09A and RM17.301.09B not more than 125 hectares of land on the property may be irrigated by either border-dyke or overland flow methods.
- 2.3 The consent holder must submit a farm irrigation plan to the Consent Authority within 10 years of this consent commencing showing all areas of irrigation.

General conditions

3. Recording and reporting

- 3.1 All taking of water must be recorded and reported in accordance with conditions 3.2 and 3.3 below at the consent holder's expense.
- 3.2
- a. The consent holder must maintain a water measuring station comprising of:
 - i. a meter to record the water takes, within an error accuracy range of +/- 5% for a piped system; or +/- 10% for an open channel system, over the meter's nominal flow range; and
 - ii. a telemetry compatible datalogger with at least 12 months data storage; and
 - iii. a telemetry unit to record the rate and volume of take, and the date and time this water was taken.
 - b. The water measuring station must be installed as close as is practicable to the point or points of take.
 - c. The consent holder must ensure the full operation of the water measuring stations at all times during the exercise of this consent.
 - d. The installation of the water measuring stations must be completed to full and accurate operation prior to the first exercise of this consent.
 - e. The water measuring stations must be calibrated by a suitably qualified operator applying International Standards methodology at least annually. Calibration documents must be supplied to the Consent Authority within 5 working days of the verification being performed, and upon request.
 - f. Where there is a malfunction of the water measuring station, appropriate repairs must be performed within 15 working days or as soon as is reasonably practicable.
- 3.3
- a. The consent holder must complete (as applicable):
 - i. the Open Channel Water Measuring Device Installation, Commissioning and Verification form for open channel takes; and/or
 - ii. the Piped Takes, Water Meter, Datalogger Installation, Commissioning and Verification forms for piped takes; andmust submit them to the Consent Authority within 5 working days of the completion of installation and verification of the water measuring device and datalogger.
 - b. 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.



- c. All malfunctions of the water measuring station during the exercise of this consent must be reported to the Consent Authority within 5 working days of observation.
- d. Once the malfunction has been remedied, the applicable form specified in condition 3.3 a. of this condition must be completed and submitted with photographic evidence to the Consent Authority within 5 working days of the completion of repairs.

3.4 The water measuring station, datalogger and telemetry unit must be safely accessible by the Consent Authority and its contractors at all times.

4. Water Management Group (agreed condition under section 108AA(1)(a) RMA)

4.1 The consent holder must be a member of a Water Management Group for the Lindis catchment.

4.2 From the fifth anniversary of the commencement of this consent the consent holder must exercise this consent in accordance with a Flow Management Plan for the Lindis catchment which:

- a. has been prepared by the Water Management Group for the Lindis catchment; and
- b. contains the matters in condition 6 attached to and forming part of this consent; and
- c. has been certified by the Consent Authority as containing the matters required by condition 5; and
- d. is implemented by the Water Management Group for the Lindis catchment.

4.3 The consent holder must not exercise this consent if:

- a. there is no Water Management Group for the Lindis catchment; and
- b. from the fifth anniversary of the commencement of this consent there is no certified Flow Management Plan.

5. Requirements for the Flow Management Plan

5.1 From the fifth anniversary of the commencement of this consent the consent holder must exercise this consent in accordance with a Flow Management Plan ("FMP") for the Lindis catchment which:

- a. has been prepared by the Water Management Group for the Lindis catchment; and
- b. must achieve the objectives stated in 5.2 below and the hydrological outcomes in 5.4 and 5.5; and
- c. have been certified by the Consent Authority as containing the matters listed in 5.3 below; and
- d. is implemented and overseen by the Water Management Group for the Lindis catchment.

5.2 The objectives of the FMP are:

- a. to minimise the frequency and duration of flows less than 600 litres per second at the Otago Regional Council's Ardour Road Flow Recorder during the months of October to May inclusive;
- b. to limit the length of the Lindis River affected by low flows;
- c. to manage the taking of supplementary allocation water;
- d. to provide the opportunity for a catchment-based approach that promotes flexibility between users for better water management, particularly during times of water shortage; and



- e. to confirm that the Lindis Catchment Group scheme¹ once implemented does result in the hydrological and ecological outcomes predicted.

5.3 To achieve these objectives the FMP must specify at least:

- a. how the instantaneous rate of take from the main stem of the Lindis River will be progressively reduced when flows recede below 1,600 litres per second at the Lindis Peak flow recorder;
- b. how takes will be rationed from the main stem of the Lindis River in advance of flows lower than 1,000 litres per second occurring at the Ardour Road Flow Recorder;
- c. how takes from the main stem of the Lindis River will be managed to ensure that the minimum flow of 550 litres per second at the Ardour Road Flow Recorder is met at all times;
- d. how condition 5.2 will be implemented;
- e. how the supplementary allocation will be managed to ensure minimum flow requirements and allocation limits are met at all times;
- f. how the primary allocations to the three reaches of the river and the tributaries (as introduced by plan change 5A) are to be managed, taking the following as a starting point:
 - i. 132 litres per second above the Lindis Peak Flow Recorder;
 - ii. 265 litres per second from the tributaries below the Lindis Peak Flow Recorder;
 - iii. 1,104 litres per second from the mainstem of the Lindis River between the Lindis Peak and Ardour Road Flow Recorders, including takes from the Lindis Alluvial Ribbon Aquifer;
 - iv. 138 litres per second from groundwater takes below the Ardour Road Flow Recorder.
- g. how the flow pulse conditions of the consent will be implemented, monitored and reported to the Consent Authority. To meet this requirement the Flow Management Plan must include provision for:
 - i. recording the magnitude, duration and timing of the flow pulse; and
 - ii. on at least three occasions in the first six times the flow pulse occurs, ascertaining the extent to which the flow pulse facilitated the out-migration of young trout to the Clutha/Mata Au; and
 - iii. the methodologies used for (i) and (ii); and
 - iv. opportunities for the Otago Fish and Game Council, if it wishes, to comment on the methodologies, participate in the monitoring and receive the monitoring report; and
 - v. reporting the results to the Consent Authority within 30 working days; the report to include:
 - 1. an assessment of the efficacy of the flow pulse in facilitating the out-migration of young trout to the Clutha/Mata Au; and
 - 2. any suggested changes to the flow pulse condition, and
 - 3. copies of any correspondence with Otago Fish and Game.

¹ By this is meant closing the existing Tarras, Ardour, Rutherfords and Beggs-Stacpoole raceways, changing a number of water takes to bores or galleries as provided for in RM17.301.07, and providing a minimum flow of at least 550 litres per second at the Ardour Road Flow Recorder.



- h. how the hydrological outcome of the scheme will be monitored against hydrological predictions. Monitoring will include:
 - a. continuous flow recording at the Lindis Peak Flow Recorder;
 - b. continuous flow recording at the Ardgour Road Flow Recorder;
 - c. continuous monitoring of all water takes authorised by these consents;
- i. how, once the scheme is implemented, any changes, if needed, would be made to ensure that the hydrological outcomes predicted by modelling can be achieved.

- 5.4 From the fifth anniversary of the commencement of this consent the hydrological outcomes expected at Ardgour Road Flow Recorder based on the modelling predictions for all primary allocation takes in the Lindis catchment are:
- a. flows will exceed 550 litres per second at all times during the irrigation season (October-May inclusive);
 - b. flows will not fall below 700 litres per second for more than 14 consecutive days during the irrigation season;
 - c. flows will exceed 1,600 litres per second at all times during the months of June to September inclusive, unless the river falls below this flow naturally;
 - d. on average flows will exceed 1,000 litres per second 70% of the time during the irrigation season over the full term of the consent;
 - e. on average flows will exceed 2,000 litres per second 40% of the time during the irrigation season over the full term of the consent.

- 5.5 The FMP must ensure that there will be a continuous surface flow at the confluence of the Lindis River with the Clutha River/Mata Au at all times.

6. General

- 6.1 The consent holder must take all practicable steps to ensure that:
- a. there is no leakage from pipes and structures; and
 - b. there is no run off of irrigation water in irrigated areas either on site or off site; and
 - c. contaminants are prevented from being drawn into the source of the water by backflow.

7. Review

- 7.1 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 for the purpose of:
- a. adjusting the consented rate or volume of water under condition 1, should monitoring under condition 3 or future changes in water use indicate that the consented rate or volume is not being or not able to be fully utilised; or
 - b. determining whether the conditions of this consent (including the special conditions (if any)) 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
 - c. adjusting or altering the method of water take data recording and transmission;
 - d. making such changes as are needed to ensure that the hydrological outcomes set out in condition 5.4 are achieved.



Notes to Consent Holder

1. *Water may be taken at any time for reasonable domestic or stock water purposes.*
2. *If you require a replacement water permit upon the expiry date of this water permit, any new application should be lodged at least 6 months prior to the expiry date of this water permit. Applying at least 6 months before the expiry date may enable you to continue to exercise this permit until a decision is made on the replacement application. Failure to apply at least 3 months in advance of the expiry date may result in any primary allocation status being lost. A late application may result in the application being treated as supplementary allocation if any such allocation is available.*

Issued at Dunedin this day of

Joanna Gilroy
Manager Consents

Appendix 1: Irrigation Command Area

