

**BEFORE THE COMMISSIONERS ON BEHALF OF  
THE OTAGO REGIONAL COUNCIL**

**Consent No. RM20.039**

**BETWEEN**

**VARIOUS – COLLECTIVELY  
KNOWN AS PIG BURN WATER  
USERS GROUP**

**Applicant**

---

**EVIDENCE OF CLAIRE ROSE PERKINS**

---

---

**GALLAWAY COOK ALLAN  
LAWYERS  
DUNEDIN**

Solicitor on record: Bridget Irving  
P O Box 143, Dunedin 9054  
Ph: (03) 477 7312  
Fax: (03) 477 5564  
Email: [bridget.irving@gallawaycookallan.co.nz](mailto:bridget.irving@gallawaycookallan.co.nz)

## TABLE OF CONTENTS

Introduction .....	4
Scope of Evidence .....	5
Summary of Proposal .....	6
Matters of Clarification .....	7
Status of Application .....	7
Rates and Volumes Sought .....	9
Water Use Efficiency .....	10
Residual and Minimum Flows .....	12
Fish Screens .....	13
Consent Duration .....	15
Summary of Consultation and Submissions .....	16
Otago Fish and Game .....	16
Aukaha .....	17
Statutory Planning Assessment .....	20
Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESF) .....	21
National Policy Statement for Freshwater Management 2020 (NPSFM) ..	21
Partially Operative Otago Regional Policy Statement 2019 .....	25
Proposed Otago Regional Policy Statement 2021 .....	25
Regional Plan Water: Otago .....	31
Proposed Plan Change 7 .....	32
Iwi Management Plans .....	33
Part 2 .....	34
Proposed Conditions of Consent .....	34
Conclusion .....	36

**ABBREVIATIONS**

LWRP	Otago Land and Water Regional Plan
MALF	Mean Annual Low Flow
MIC	Maniototo Irrigation Company
NESF	Resource Management (National Environmental Standards for Freshwater) Regulations 2020
NPSFM	National Policy Statement for Freshwater Management 2020
NRMP	Kai Tahu ki Otago Natural Resource Management Plan
NTFWP	Te Rūnanga o Ngāi Tahu Freshwater Policy Statement
ORC	Otago Regional Council
P-ORPS 2021	Proposed Otago Regional Policy Statement 2021
PO-RPS 2019	Partially Operative Regional Policy Statement for Otago 2019
PPC7	Proposed Plan Change 7 (Water Permits) to the Regional Plan: Water for Otago
PWUG	Pig Burn Water Users Group
RMA	Resource Management Act 1991
RMR	Resource Management (Management and Reporting of Water Takes) Regulations 2010
RPW	Regional Plan Water: Otago

## Introduction

1. My full name is Claire Rose Perkins and I am employed as a Senior Planner and Planning Team Lead at Landpro Limited, a firm of consulting planners and surveyors. I hold the qualification of BAppSc (Hons) in Environmental Management from Otago University. I have been a planning and environmental consultant for 14 years, 11 of those with Stantec (formerly MWH New Zealand) and for the last 3 years with Landpro Ltd, providing consultancy services for a wide range of clients throughout New Zealand.
2. I hold associate membership of the New Zealand Planning Institute.
3. In this time, I have undertaken a wide variety of resource management related work for various clients, including preparing resource consent applications, preparing assessment of effects, stakeholder engagement and consent management services, with a particular focus on water resources. This work has included providing evidence at Council hearings and Environment Court.
4. I confirm that I have read and agree to comply with the Environment Court Code of Conduct for Expert Witnesses (Consolidated Practice Note 2014). This evidence is within my area of expertise, except where I state that I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.
5. I have been engaged by Pig Burn Water Users Group (PWUG) (the applicant) to prepare this planning evidence.
6. In preparing this evidence, I have read and relied upon the experts' understanding of the application site and surrounds. Mr Hickey and Dr Olsen have undertaken site visits and they have a comprehensive on-the-ground understanding of the environment. While I am familiar with the pastoral landscape and rural locale within which the proposed activities are situated, I rely upon their expert understanding of the site and surrounding environment to inform my planning assessments.

7. I have not provided any expert planning advice in the development of this proposal and did not participate in the preparation of the resource consent application.
8. In preparing this statement I have:
- Reviewed the application (as lodged) for consent and associated s92 response
  - Reviewed the amended application for consent
  - Reviewed submissions from Aukaha, Otago Fish and Game
  - Reviewed correspondence between the applicant's agent and the Department of Conservation
  - Read the Section 42A report and associated technical reviews
  - Read the technical reports and associated evidence being called by the applicants, including:
    - Mr G Herlihy; Greenbank Pastoral Ltd and Hamiltons Dairy Limited
    - Mr J Herlihy; Greenbank Pastoral Ltd and Hamiltons Dairy Limited
    - Mr Mulholland
    - Ms Weir; Hamilton Runs Limited
    - Ms Smith;
    - Mr Bradfield; En Hakkore
    - Mr Hickey; Hydrology & Aquatic Ecology
    - Dr Olsen; Freshwater Ecology

### **Scope of Evidence**

9. I have read the Section 42A report prepared by Ms King and while I generally agree in principle with the findings of the report, there are a number of updates or corrections required. These are discussed in paragraphs [17] - [19] below.
10. I largely agree with the determination that the adverse effects on natural character, amenity, recreation, instream values, and cumulative effects will be no more than minor<sup>1</sup>, and that the adverse effects on cultural values are minor. However, I provide additional commentary on the

---

<sup>1</sup> Section 42A Report, Otago Regional Council, 24 August 2021 Section 7.9

proposed residual flow regime and fish screening conditions in response to Ms King's recommendations on these aspects of the proposal.

11. I also largely agree with the statutory planning analysis set out in the s42A report, except where I have discussed otherwise in my evidence. In particular, Ms King does not consider that the application is consistent with some of the provisions of the National Policy Statement for Freshwater Management (NPSFM 2020), Proposed Otago Regional Policy Statement (P-ORPS 2021) and Te Rūnanga o Ngāi Tahu Freshwater Policy Statement (NTFWP). I disagree with this and have provided some additional commentary on how the proposal aligns with the provisions of the NPSFM 2020, P-ORPS 2021, iwi plans, and proposed changes to the recommended conditions including as a result of issues raised by submitters and Ms King.
12. My evidence is structured as follows:
  - Summary of Proposal
  - Matters of Clarification
  - Status of the Application
  - Rates and Volumes Sought
  - Water Use Efficiency
  - Residual and Minimum Flows
  - Fish Screens
  - Consent Duration
  - Summary of Consultation and Submissions
  - Statutory Planning Assessment
  - Proposed Conditions of Consent

### **Summary of Proposal**

13. A detailed overview of the proposal by the PWUG is included in the application and is set out in the evidence in chief of Mr G Herlihy and Mr Hickey, including an outline of the history of the Water Users' Group and the development of the Group's proposal. I will not repeat this here.
14. The subject sites and proposal have been fully described in the application documentation and the s42A Report, including the deemed

permits subject to the application, the consents sought, and the proposed mitigation and conditions of consent. I will not repeat this here.

15. In the large, I accept Ms King's description of the proposal as set out in Sections 2.1 and 3, and the description of the site and surrounding environment in Section 4.1.
16. I focus the remainder of my evidence on the remaining issues in contention.

### **Matters of Clarification**

17. Throughout the s42A Report and in the draft consent conditions, Concept Farms Ltd and the Sophic Trust are recorded as one entity (expressed as Concept/Sophic relating to Take 6) with regard to Permit 97128 and replacement consent RM20.039.06. Due to a change in company structure and property ownership, the relevant portion of RM20.039.06 is now held by Sophic Trust only. Corrections are shown in tracked changes to the recommended conditions of consent in Attachment A.
18. I address differences in opinion of the status of the application in my evidence (paragraphs [20] to [30]).
19. The recommended draft Permit RM20.039.01 in Appendix 1 to the s42A Report does not specify the legal description of land relating to Janine Ruth Smith. This information is contained in the application documentation and has been shown in tracked changes in Attachment A to this evidence.

### **Status of Application**

20. Section 6 of the Section 42A Report discusses the status of the application. It identifies the activity status as follows:
  - Rule 12.1.4.1 applies to the re-take of surface water as a *restricted discretionary* activity.
  - Rule 12.1.4.4 applies to the taking of surface water, as primary allocation, as a *restricted discretionary* activity.

- *Discretionary activity* under s136(2)(b)(ii) of the RMA for the proposed transfer of point of take.
21. I note the s42A report is a little unclear on the status of the replacement of the discharge into Harpers Creek (Consent 2000.245). At the top of page 26, section 5.1, Ms King considers the discharge permit as a discretionary activity in her discussion of bundling, but then goes on to consider it a permitted activity in the subsequent paragraph.
  22. While the application included the discharge activity in its summary of applications required, in my opinion the proposed discharge will meet the conditions of Rule 12.C.1.1 as it is within the same overall catchment. It would therefore be a *permitted activity*. This is consistent with Ms King's assessment.
  23. In respect of the transfer of the points of take, I disagree with Ms King in terms of the consideration of section 136 of the RMA as being relevant.
  24. Section 136 applies to the transfer of the whole or part of a water permit to another site if both sites are in the same catchment. Any application to which section 136 applies is treated as a discretionary activity. Because of this the s42A report concludes that the overall application status, once bundled, should be *discretionary*.
  25. I do note that consent has been sought under s136 of the RMA in the original application.
  26. The applicants propose to relocate two take points, one upstream and one downstream in the catchment, to a combined intake (Take 6) as part of the proposed flow regime to improve the natural character of the flows in the Pig Burn. The applicants are not proposing to amend or transfer any existing permit, or part thereof, to this alternate site and there is no increase in the allocation.
  27. Because the replacements of the current permits are treated as new permits, the relocation of these take points is not considered a transfer. The effects associated with abstraction occurring either slightly above or



slightly below their existing locations in the catchment have been appropriately considered in the application.

28. Overall, I consider the status of the applications is therefore *restricted discretionary*.
29. I agree with Ms King's interpretation of activity status with regard to the relevance of Plan Change 7 to the application. I consider the status of the application to be *restricted discretionary* in accordance with Section 88A(1)(A) being the activity status the applied under the Regional Plan Water: Otago (RPW) when the application was made.
30. The matters for discretion set out in Rules 12.1.4.1 and 12.1.4.4 have all been adequately addressed in the application, evidence of Mr G Herlihy, Mr Hickey, Dr Olsen and the Section 42A Report.
31. Should the Commissioner consider that the transfer provisions are relevant, then I agree that it is appropriate to apply the 'bundling approach' and that the application would be considered a *discretionary activity*. I do not consider that there would be any material difference in the matters that need to be considered in relation to a decision under Section 104B instead of Section 104C of the RMA.

#### **Rates and Volumes Sought**

32. The rates and volumes applied for by the applicant are accurately set out in Section 7.2.2.4 of the s42A report. I have reviewed the Aqualinc efficiency calculations provided with the s42A report which reflect those pursued as part of the application, with the key difference being:
  - the report writer's consideration of the 90th percentile Aqualinc figures (while the application used the 100th percentile). I agree with the conclusions reached in Section 7.2.2.2 by Ms King that the 90th percentile figures are appropriate for use here.
  - Ms King's inclusion of monthly volumes. I agree with the recommended monthly volumes as set out in the s42A report.

- discrepancies in the respective historic data analyses contained in the application and the s42A Report, specifically relating to Permit 97120 held by Hamilton Runs Ltd and Permits 97128/2000.498. I have reviewed the ORC's technical review of the data and discussed them with Mr Hickey and the applicant. It appears that there may have been some differences in the data that was used in the technical review. Using the correct data it appears that a higher annual volume would result, one more in line with aqualinc requirements and consistent with demand arising from the applicants infrastructure which has recently been upgraded (as discussed in the evidence of Ms Weir). However, the data discrepancies had not been fully resolved at the time of filing this evidence. I consider that the annual volume in Condition 3(c) in Permit 20.039.05 should reflect the correct annual volume once it has been confirmed.
  - Overall, with the amendment in accordance with the previous bullet when it available, I accept the remaining recommended allocations of water provided in the s42A Report, on the basis that these volumes appropriately reflect the historic use of water by the PWUG provided for in Policy 6.4.2A of the RPW.
33. The proposal will result in a reduction in the combined historic rate of abstraction of water of 122 l/s from the Pig Burn which will reduce primary allocation within the Taieri catchment and ultimately ensure an efficient allocation and use of the water in the future (consistent with Policy 11 of the NPSFM). Note that this reduction is not just from paper water but from the rate that has been historically used.

### **Water Use Efficiency**

34. The s42A report references on page 45 that the Mullholland's are proposing to upgrade their flood irrigation methods to spray, and subsequently a consent condition to this effect has been proposed (Condition 11 of Consent RM20.039.06). In the evidence prepared by Mr Mulholland it is apparent that efficiency improvements foreshadowed in the application (spray conversion and storage) have been completed in

November 2020 and so in my opinion this recommended condition is obsolete and can be removed. I have shown this change in tracked changes in Attachment A to this evidence.

35. Ms King recommends a condition of consent on each replacement permit that requires the Consent Holders to supply a water use efficiency report to the Consent Authority on an annual basis. Such a report would require the Consent Holder to supply information on water usage (month by month, and related to crops in the ground), reasons why the use may have varied, information on any measures undertaken to avoid loss or wastage of water specifically from the race system, and whether there have been any changes or modifications to irrigation (and water conveyance) infrastructure.
36. The applicants consider the requirements of this condition to be unnecessarily onerous, for the following reasons:
  - Most applicants who had plans to upgrade have already converted to more efficient irrigation systems so would have nothing to report in this respect for some years.
  - The volumes applied for have been shown to be efficient through Aqualinc calculations.
  - Reporting on an annual basis would not necessarily provide any new information not already captured in this consenting process or by the standard water monitoring conditions.
  - Applicants are working to understand the new freshwater farm plans in response to new RMA provisions, so wish to avoid a duplication of effort.
37. In this context, the intended purpose of the recommended condition is unclear. In my view the provision of a water efficiency report by consent holders would be more appropriate at 5 yearly intervals following the issuing of replacement permits. This is because measures to implement water use and efficiency upgrades (beyond day-to-day management measures) occur over time. Therefore, annual reports are unlikely to be

of much utility. I would also expect seasonal variability in a catchment such as the Pig Burn to largely confound incremental efficiency improvements over that timescale. I have shown this change in tracked changes in Attachment A to this evidence.

38. The evidence of both Mr G Herlihy and Mr Hickey describe the complexity of the Taieri Catchment due to the Maniototo Irrigation Scheme and its associated storage which effectively controls flow levels in the mainstem. As will be apparent from the application, many of the Pig Burn water users also rely on water delivered by this Scheme and operate integrated systems on farm to utilise the available water as efficiently and effectively as possible.
39. Overall, I consider the proposal is for an overall efficient and sustainable use of water as provided for in Policy 6.4.0A of the RPW.

#### **Residual and Minimum Flows**

40. The applicants agree to the inclusion of the Taieri River minimum flow of 1,000 l/s at Waipiata from the commencement of these consents as recommended in the s42A report. This is different to what was originally sought in the application that the Taieri River minimum flow only apply after a full catchment review is undertaken.
41. I agree with Ms King that it is appropriate to include this minimum flow now as part of the catchment approach this application seeks to achieve, and for the wider benefits to the mauri of the Taieri catchment that can be gained from this, despite the relatively small contribution from the Pig Burn to the Taieri River at the confluence at times of low flow (based on the average MALF of 53 l/s referenced in the evidence of Mr Hickey).
42. The recommended residual and minimum flows for the Pig Burn outlined in the s42A report in Table 5 are accepted apart from the proposed increased in the residual flow below Take 6 and 7 (Combined take and Concept North). The reasons for this are discussed in the evidence of Mr Hickey and discussed below.

43. Based on the assessment undertaken by Dr Allibone, Ms King recommends the 10 L/s residual flow proposed at the combined take (Take 6) and the Concept North takes (Take 7) be increased to 20 L/s throughout the duration of the consents (10 L/s years 0-5 and 20 L/s years 6 – 14). It is explained that the existing habitat model has been built to model this reach and the 10 L/s residual flow provides little habitat for any fish species. The recommended increase in residual flow is said to address concerns raised by submitters.
44. Both Mr Hickey and Dr Olsen have considered Dr Allibone’s reasoning for the recommended increase to the proposed residual flow, and each note the inconsistency of this recommendation with Dr Allibone’s position in the pre-hearing meeting where it is recorded *“that the habitat model should not be relied upon as it has a lot of errors.”*<sup>2</sup>. Both Mr Hickey and Dr Olsen remain of the view that the proposed residual flows are appropriate and justified. Their further analysis demonstrates that the increase achieves little, if any benefit.
45. I have amended the proposed conditions in Attachment A to reflect this and also note that I have included a timeframe to install this of 2 years (to 1 October 2023). This is due to the impending expiry date of the current permits of 1 October 2021, the irrigation season commencing at a similar time, and the fact that a decision on these applications will be close to this, thus not allowing for any time to design, manufacture and install a measuring device before irrigation commences under the new permits.

### **Fish Screens**

46. Fish screen requirements on each of the intakes are discussed in the s42A report based on the assessment provided by Dr Allibone. Dr Olsen has reviewed the recommended fish screening and generally agrees with the fish screening recommendations, except in relation to the Herlihy Ford and Combined Take.

---

<sup>2</sup> Report on a pre-hearing meeting on 30 July 2020 at Otago Regional Council’s offices, 70 Stafford Street, Dunedin. Resource consent application RM20.039.

47. On this basis I accept the following agreed assessments on fish screening requirements:

- Fish screens are not necessary on 'Take 1' – being the shared take above the gorge, due to the lack of fish, and I note that draft permit RM20.039.01 correctly excludes a fish screen condition.
- The existing mesh screen on 'Take 2' – being the Bradfield/En Hakkore Ltd take is likely adequate given the small size of the take relative to the flow. I note that draft permit RM20.039.02 includes an appropriate condition requiring the consent holder to maintain a mesh fish screen.
- With regard to 'Takes 3 and 4' – being the Herlihy Gorge Take and the Weir Take respectively, less substantial fish screens may be more appropriate at these locations. I note that draft permits RM20.039.03 and RM20.039.05 include a consent condition that would enable the applicants to investigate an appropriate fish screen design prior to exercising the consent. This is an acceptable condition, with an amendment to the timing for this to be prior to the 2023 irrigation season.
- With regard to 'Takes 5 & 6' – being the Herlihy Ford and Combined Take, based on Dr Olsen's assessment, I am of the view that fish screens are not required on these takes because they feed into the race and reservoir network associated with MIC. These areas provide habitat for trout and have high sport fishing values in their own right. Consequently, the recommended fish screen conditions have been removed from the draft permits RM20.039.04 and RM20.039.06 as contained in Attachment A to this evidence.
- With regard to 'Take 7' – being the Kirkwood North (Concept Farms Ltd take, I agree with the recommended condition of consent on draft permit RM20.039.07, with an amendment to the timing for this to be prior to the 2023 irrigation season.

48. Based on Dr Olsen's review of recommended consent conditions, I have proposed revised conditions as reflected in Attachment A to this evidence.
49. Where I have made a recommendation with regards to timing of the fish screen installation, this is for the same reasons as outlined in paragraph [45] when discussing the residual flow measuring device installation.
50. Based on my understanding from the applicants of the challenges associated with the design of a suitable fish screen in this environment (refer evidence of Mr J Herlihy), I consider that 2 years is an appropriate timeframe to allow for for this.

### **Consent Duration**

51. Section 10 of the s42A report sets out the recommended consent expiring 31 December 2035 and the reasons for this recommendation according to case law.
52. I note that the PWUG is now proposing a consent term expiring 1 January 2034 to align with the expiry of the Maniototo Irrigation Company (MIC) permits.
53. As discussed in the application and in paragraph [38], a number of the applicants also hold MIC shares for irrigation purposes and operate integrated systems on farm. Aligning the expiry dates ensures that there is an opportunity to consider further renewals in a more integrated way within the Taieri catchment.
54. A significant proportion of the Taieri catchment total allocation is held by the MIC through their current consents, and the nature of the MIC dams and residual flow conditions effectively controls the flows in the Taieri River at the Waipiata and Paerau minimum flow sites (refer evidence of Mr G Herlihy).
55. In my view aligning the consent term would allow the ORC to apply any future limits set in the catchment through the Otago Land and Water Regional Plan (LWRP) in a consistent and integrated manner and still

within the life of that plan<sup>3</sup>. Notably, this approach would reflect the increasing emphasis on integrated catchment management promoted by the NPSFM compliant policies in the P-ORPS 2021 (discussed further in paragraphs [109] to [126]).

56. I note that this duration is also consistent with the intent of the Proposed Plan Change 7 to the RPW (PPC7) Policy 10.A.2.3 limiting consent durations (paragraphs [133] to [138]).

### **Summary of Consultation and Submissions**

57. The evidence of Mr G Herlihy provides a comprehensive summary of the efforts by the PWUG to engage affected parties and the uncertainties characterising the engagement process to date. Engagement activities included written correspondence, site visits, meetings, and a formal pre-hearing meeting.
58. Ms King provides a comprehensive summary of the initial limited notified process and subsequent amendment and re-notification of the amended proposal, and the content of the submissions received. I will not repeat this here.
59. I note that the Department of Conservation did not submit on the application on the basis that the application contains a robust assessment of hydrological and ecological effects, that there are relatively low conservation values potentially affected, and that the revised abstraction regime and proposed mitigation measures are appropriate to manage any adverse effects of the proposal.
60. I will now turn to the key submission points raised by Fish and Game and Aukaha and provide my view on each matter in turn.

### **Otago Fish and Game**

61. In its submission, Fish and Game sought that the residual flow be increased and that a residual flow be imposed to provide for brown trout spawning.

---

<sup>3</sup> A regional plan must be reviewed at least every 10 years as per Section 79(1) of the RMA.



62. Both Mr Hickey and Dr Olsen conclude that the proposed environmental flow regime will enhance habitat compared with existing flows. Specifically, Dr Olsen states in his evidence that passage for Brown Trout will be similar or slightly enhanced relative to existing flows in the section from just upstream of Hamilton Road down to the Patearoa-Waipia Road bridge. I consider the flow regime that has been recommended by Mr Hickey and Dr Olsen will generally retain the natural pattern of gaining and losing flow reaches, thus also retaining the natural character of the Pig Burn while also retaining trout spawning habitat in the lower reaches at critical times.
63. I agree with Ms King's view in relation to Fish and Game's request that hydrology and ecology monitoring programmes are best undertaken as part of Council's mandatory State of the Environment monitoring obligations under the RMA. Similarly, I agree with Ms King's and Dr Allibone's view relating to Fish and Game's request for a water harvesting regime to be implemented i.e. that the combined take proposal (Take 6) to take 110 L/s whilst leaving 200 L/s is enabling more than a 50:50 flow sharing of harvested flow, and that given the natural variability in flow, no adverse effects are anticipated on fish passage or trout spawning.

#### **Aukaha**

64. In considering the issues raised by Aukaha, there is no evidence in their submission relating directly to the PWUG and private rights holders' scheme and waterbodies subject to this application, but rather their submission traverses tangata whenua's close relationship with the Taieri River catchment as a whole.
65. With regards to the proposed term of consent, I understand iwi's concerns to primarily rest around the ability of tangata whenua and ORC to consider all activities under a planning framework that gives effect to the NPSFM and the principle of Te Mana o te Wai.
66. The ability for ORC to review the consents as a result of any future plan change is the key concern raised by Aukaha in respect of the term of the consent.

67. However, in my opinion, should the future LWRP set minimum flows for the catchments subject to these consents, ORC has the power to review the consents. This review can require the adoption of any new minimum flow and allocation regime on these permits. This is specifically identified in the proposed review condition contained in each of the draft permits and is consistent with the direction of Objective 1 of the NPSFM to prioritise the health and well-being of freshwater ecosystems and Policy 3 of the NPSFM to manage catchments in an integrated way.
68. Being able to implement any newly developed minimum flow and allocation regime will ensure that, as noted in Section 4.5 of the RPW, *“the outcomes sought by Kāi Tahu are the continued health and wellbeing of the water resources of the region, and cultural usage of these resources”*<sup>4</sup>. Whilst the RPW has not been prepared under the NPSFM framework, this identified outcome is consistent with the direction of Te Mana o te Wai and giving priority to *“first, the health and well-being of water bodies and freshwater ecosystems”* as outlined in the NPSFM and P-ORPS 2021 (NPSFM: Objective 1, Policy 1; P-ORPS 2021: LF-WAI-01, LF-WAI-P1, LF-WAI-P2, LF-WAI-P3).
69. As highlighted in the application, a longer consent term (i.e more than 6 years requested in the Aukaha submission) is required in order to be able to obtain funding for the investment needed to implement the proposed mitigation measures such as combined take points, residual and minimum flows, flow harvesting at higher flows and significantly reduced rates of take. The investment is required in particular for infrastructure associated with the combined intake for some of the users, installation of storage and upgrade of irrigation infrastructure.
70. A longer term also reflects the level of investment that water users have committed to date in preparation for this renewal process. As discussed by Mr Mulholland and Ms Weir, short terms consents may affect their equity position and undermine their viability.
71. There is a clear benefit to the health and well-being of the freshwater ecosystems in the Pig Burn and Taieri River to undertake these changes

---

<sup>4</sup> Otago Regional Water Plan, Section 4.5, Page 4-3.

now. The proposed mitigation measures represent a substantial shift in managing the Pig Burn catchment in an integrated way whilst enhancing the flows and habitat that has been in place under the deemed permit regime for the past 120-140 years. As identified in the evidence of Mr Hickey and Dr Olsen, the proposed flow regime will better align with the natural character of the Pig Burn and ensure the effects on physical instream values will be no more than minor, including improving the groundwater/surface water interface that occurs along the length of the Pig Burn. These improvements are not achievable with only a short term, and nor are they anticipated in light of PC7. The proposed expiry of 2034 represents a modest length of time within which the proposed activities will occur before being re-considered in full.

72. In the meantime, any changes to the minimum flow regime in the wider Taieri catchment can still be implemented through a review of these consents, if the Council seeks to implement them earlier than the current 2034 expiry date of the MIC consents.
73. For reference I refer to the details included in the application that states the majority of the water permits in the Taieri River Catchment have expiry dates beyond 2031. Approximately 78% of the water in the Taieri River Catchment (l/sec) has already been re-issued on permits that expire between 2031 and 2054 as shown in the Table 19 of the application (included below).

*Table 19. The percentage of permits in the Taieri Catchment within each expiry date range.*

Expiry date	Sum of the l/s allocated	Percentage of the catchment
Expire by 2024	5951.06	20.8%
Expire between 2024 and 2027	117	0.41%
Expire between 2031 and 2054	22504.95	78.8%
Total	28,573.01	100%

74. Aukaha's preference for leaving 50% of the flow in the waterway has been addressed by Ms King in the s42A Report. I agree with her view that if a new allocation regime is to be set, a Schedule 1 process is the most appropriate mechanism for a catchment wide review to occur. This may be undertaken through the development of the LWRP.

75. Aukaha's preference for a minimum flow of 90% of MALF has been addressed by Ms King in the s42A Report based on Mr Allibone's assessment of the ecological values present and the hydrological conditions at each take location. I agree with her conclusions in this regard.
76. Aukaha seeks that the proposed residual flows be increased. The reasons for the proposed residual flows have been outlined by Mr Hickey and Dr Olsen in their evidence and addressed in paragraphs [42] to [44].
77. Fish screen requirements have been discussed in paragraphs [46] to [48].

### **Statutory Planning Assessment**

78. The assessment in the Application and Amendment against the relevant objectives and policies of the following documents remains valid and having reviewed this I agree with the assessments of the following documents:
  - Resource Management (Management and Reporting of Water Takes) Regulations 2010 (RMR)
  - Partially Operative Regional Policy Statement for Otago 2019 (PO-RPS 2019)
  - Regional Plan: Water for Otago (RPW)
  - Kai Tahu ki Otago Natural Resource Management Plan (NRMP)
  - Te Rūnanga o Ngāi Tahu Freshwater Policy Statement (NTFWP)
79. In my evidence below I return to some of the above statutory documents because the provisions assessed in the Application merit further consideration in response to the s42A report and/or submissions. I also provide an assessment of the following statutory documents because they were not a valid consideration at the time the Application was prepared (but are now):

- Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESF)
- National Policy Statement for Freshwater Management 2020 (NPSFM20)
- Proposed Otago Regional Policy Statement 2021 (P-ORPS 2021)
- Proposed Plan Change 7 (Water Permits) to the Regional Plan: Water for Otago (PPC7)

**Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESF)**

80. The NESF came into force on September 3 2020, following the Application being accepted by Council. As such, the NESF was not assessed as part of the Application but is now a relevant document to consider. After assessing the proposal against the NESF, my understanding is that additional consent is not required under these regulations.

**National Policy Statement for Freshwater Management 2020 (NPSFM)**

81. The NPSFM 2020 came into force after the Application was lodged and so was not assessed at the time. I have therefore provided my opinion in respect of the Application and the provisions of the NPSFM below.
82. I agree with the overall conclusion of Ms King that the proposal is generally consistent with the NPSFM subject to the recommended conditions in Attachment A, however I disagree with her assessment that the proposal is inconsistent with Policy 1 because it does not achieve the intent of Te Mana o te Wai. This is addressed further below.
83. Objective 1 aims to ensure that natural and physical resources are managed in a way that prioritises the health and well-being of water bodies and freshwater ecosystems before other uses.
84. I agree with the conclusions in the s42A report, and the expert opinions of Mr Hickey and Dr Olsen, that the proposed flow regime on the Pig Burn has given priority to ensuring that the well-being of the water body

and it's freshwater ecosystems are provided for ahead of the needs of people and communities to provide for their social, economic and cultural wellbeing.

85. In light of this, I consider that the Application is consistent with Objective (1).
86. I consider the NPSFM policies most relevant to the Application are Policies 1, 2, 3, 7, 9, 10, 11, and 15.
87. Policy 1 requires freshwater to be managed in a way that gives effect to Te Mana o te Wai.
88. This concept recognises the importance of the health of freshwater, protection of the mauri of the wai and the need to restore and preserve the balance between the water, the wider environment, and the community.
89. As concluded in paragraph [84], the proposed flow regime has prioritised the health of the freshwater resource.
90. I note that submission from Aukaha emphasises the importance of the mauri within the Taieri catchment as a whole but does not drill down further to explicitly address the degree of influence that the Pig Burn has from a cultural perspective. Whilst I am not a cultural expert, so cannot speak directly to the mauri of a waterbody, I have used the references available to me, in particular the explanation of the concept in the Te Rūnanga o Ngāi Tahu Freshwater Policy Statement (NTFWP) and the Aukaha submission, to further evaluate the concept of Te Mana o te Wai.
91. The NTFWP in section 4.2.1, explains that  
*“mauri can be tangibly represented in terms of elements of the physical health of a river ecosystem. While there are also many intangible qualities associated with the spiritual presence of the river, elements of physical health which Ngāi Tahu use to reflect the status of mauri and to identify the enhancements needed include:*

- *Aesthetic qualities e.g. clarity, natural character and indigenous flora and fauna;*
- *Life-supporting capacity and ecosystem robustness;*
- *Depth and velocity of flow;*
- *Continuity of flow from the mountain source of a river to the sea;*
- *Fitness for cultural usage; and*
- *Productive capacity.”*

92. I agree with the conclusions reached in the s42A report and from Mr Allibone and Dr Olsen that in regard to the physical indicators, the proposed activities will have no more than minor effect on the life supporting capacity and ecosystem robustness of the Pig Burn. Whilst I agree that there will always be some effect on mauri from water abstractions, I consider that the proposed flow regime will improve the mauri of the waterbody from its current state through increased flows remaining in the stream and reduced volumes of water being abstracted. This proposal will better reflect the natural character of Pig Burn through its natural losing and gaining reaches, by preventing the dewatering of naturally perennial reaches and introduction of a more seasonal flow regime that will improve instream habitat.
93. I consider that past abstraction will have affected the mauri of the Pig Burn, however with the proposed flow regime, this proposal will enable restoration of the balance between the water, the wider environment, and the community and therefore improve the mauri.
94. In terms of ki uta ki tai, I understand that this concept recognises the importance of maintaining connection of water between the source and the sea. Applying this paradigm to the Pig Burn, investigations by Mr Hickey suggest that this connection is provided first by surface water flows, then when those flows move to the subsurface zone the connection continues via groundwater before re-surfacing further downstream. The inclusion of a residual flow for the takes in the lower reaches of the Pig Burn will ensure that some water will always continue

past the intakes and connect either via the surface or subsurface through to the Taieri confluence. Adherence to the Taieri River minimum flow will further support and enhance Kāi Tahu values in the catchment.

95. In a broader catchment sense, alignment of these applications with the MIC expiry will enable the implementation of a fuller integrated management approach that will better be able to address the land and water connections of ki uta ki tai because of the large volume of water allocated through the MIC consents and the significant role they play in maintaining flow levels in the mainstem of the Taieri.
96. With respect to water quality matters, when the LWRP becomes operative rules that address this will need to be complied with or consent obtained within 6 months. Therefore, the term of these consents will have no consequences for the speed at which those measures will be implemented.
97. I therefore consider the application is consistent with Policy 1 and consistent with the principle of Te Mana o te Wai.
98. Policy 2 has been addressed through the participation of Aukaha in the consent process and will be further considered through the LWRP process.
99. Policy 3 directs that freshwater is managed in an integrated way, on a whole-of-catchment basis, including the effects on receiving environments.
100. This application is clearly aligned with this policy through the inclusion of all permits in the Pig Burn catchment taking a whole-of-catchment approach in developing the proposed flow regime with reduced allocations, shifting of take points, residual flows and higher flow harvesting in order to prioritise the health of the Pig Burn freshwater environment.
101. Policies 7, 9 and 10 refer to protection of the habitats of indigenous freshwater species as well as trout, and the preference to avoid the loss of river extent and values. Based on the expert opinions of Mr Hickey



and Dr Olsen, in respect of the effects on instream habitats and river extent, I consider the application is consistent with these policies.

102. Policy 11 focuses on the efficient allocation and use of resources, followed by the phasing out of any existing over-allocation. As discussed in paragraphs [38] to [39], I consider these applications represent an efficient allocation of the water resource.
103. In respect of over-allocation, under the current operative planning framework the Taieri catchment is not considered over-allocated. This is because, despite the inclusion of an allocation limit in the RPW<sup>5</sup> which is exceeded, the direction of Policy 6.4.2 considers the limit to be the greater of Schedule 2A or consented allocation. I do note, however, that this application will see a reduction in allocation of 122 l/s, which represents an approximately 27% reduction from the current permits.
104. Policy 15 enables communities to provide for their social, economic and cultural wellbeing. I agree with the assessment in the s42A report and has been explained by the evidence from the applicant's themselves, that this proposal will provide for the social and economic wellbeing of the applicant's, whilst also providing for the social and cultural wellbeing of others through the proposed flow regime.

#### **Partially Operative Otago Regional Policy Statement 2019**

105. The S42A report includes a list of all the relevant policies of the PO-RPS 2019 which is generally consistent with the provisions assessed in the application.
106. I agree with the conclusions reached in the S42A report that the applications are consistent with the provisions of the PO-RPS 2019.

#### **Proposed Otago Regional Policy Statement 2021**

107. Whilst the P-ORPS 2021 was only notified on 26 June 2021, because it is the first planning document in Otago that has been developed in

---

<sup>5</sup> Schedule 2A of the RPW – although this was not developed under the NPSFM framework

consideration of the direction provided by the NPSFM 2020, I consider that a reasonable degree of weight should be given to it.

108. There are a large number of provisions in the P-ORPS 2021. Below I have evaluated the most relevant provisions which also generally aligns with those identified in the s42A report. Where the full wording of these provisions has not been provided in the s42A report I have included it here.

#### Mana Whenua

109. The relevant provisions from the Mana Whenua chapter are:

- MW-O1 – Principles of Te Tiriti o Waitangi
- MW-P2 – Treaty principles
- MW-P3 – Supporting Kāi Tahu well-being

110. Insofar as this application can consider these provisions, many of which relate to the involvement of Kāi Tahu in the wider planning processes, I consider that Kāi Tahu have been involved in this resource management process to date, the principles of Te Tiriti o Waitangi are being given effect to and the mauri and other cultural values associated with the Pig Burn as part of the Taieri catchment will start to be restored through the implementation of the proposed flow regime, while safeguarding the life-supporting capacity of the waterbody.

#### Integrated Management

111. The relevant provisions from the Integrated Management chapter are:

- IM-O1 – Long-term vision

*The management of natural and physical resources in Otago, by and the people of Otago, including Kāi Tahu, and as expressed in all resource management plans and decision making, achieves healthy, resilient, and safeguarded natural systems, and the ecosystem services they offer, and supports the well-being of present and future generations, mō tātou, ā, mō kā uri ā muri ake nei.*

- IM-O2 – Ki uta ki tai
- IM-O3 – Environmentally sustainable impact

*Otago's communities carry out their activities in a way that preserves environmental integrity, form, function, and resilience, so that the life-supporting capacities of air, water, soil, ecosystems, and indigenous biodiversity endure for future generations.*

- IM-P1 – Integrated approach

*The objectives and policies in this RPS form an integrated package, in which:*

*(1) all activities are carried out within the environmental constraints of this RPS,*

*(2) all provisions relevant to an issue or decision must be considered,*

*(3) if multiple provisions are relevant, they must be considered together and applied according to the terms in which they are expressed, and*

*(4) notwithstanding the above, all provisions must be interpreted and applied to achieve the integrated management objectives IM-O1 to IM-O4.*

- IM-P2 – Decision priorities
- IM-P5 – Managing environmental interconnections
- IM-P6 – Acting on best available information
- IM-P13 – Managing cumulative effects
- IM-P14 – Human impact
- IM-P15 – Precautionary approach

112. I consider that this proposal is consistent with the three Objectives IM-O1 to IM-O3 and Policies IM-P1 and IM-P13. These three objectives focus on the interconnectedness of the environment and the need to consider activities cumulatively in respect of the life-supporting capacities of air, water, soil, ecosystems, and indigenous biodiversity so that they endure for future generations.

113. This proposal's catchment approach does this through the consideration of all water abstractions across the catchment, development of an improved flow regime that addresses the environmental integrity, form, and function of the Pig Burn, and the linkage of the Pig Burn sub-catchment through to the Taieri minimum flows and requested common expiry with MIC.
114. I agree with Ms King that the application has prioritised the life-supporting capacity and mauri of the natural environment before other uses and is therefore consistent with IM-P2.
115. The substantial investigative work undertaken in the Pig Burn catchment over the last 5 years means that the best available information is being used (IM-P6) and the proposed flow regime that considers the natural character of the Pig Burns losing and gaining reaches has been designed to manage the natural environmental interconnections (IM-P5).
116. The proposed changes to the way the takes operate in the Pig Burn catchment clearly align with IM-P14 in recognising the need to balance the impact the activities were having on the natural capabilities and capacities of the freshwater resource. This policy is further supported by the proposed residual flows ('thresholds') for the proposed activities to minimise the potential environmental impacts.
117. Lastly, Policy IM-P15 requires the adoption of a precautionary approach. While I don't consider that there are any significant adverse effects that are uncertain, unknown or little understood, the proposed consent term and alignment with the MIC expiry will mean that any additional values that are identified in the future LWRP can be appropriately addressed in an integrated way at a wider catchment level, if not reviewed earlier.

#### Land and Freshwater

118. The relevant provisions from the Land and Freshwater chapter are:
- LF-WAI-O1 – Te Mana o te Wai
  - LF-WAI-P1 – Prioritisation

- LF-WAI-P2 – Mana whakahaere
- LF-WAI-P3 – Integrated management/ki uta ki tai
- LF-WAI-P4 – Giving effect to Te Mana o te Wai
- LF-VM-O4 – Taieri FMU vision
- LF-VM-O7 – Integrated management
- LF-FW-O8 – Freshwater
- LF-FW-P7 – Freshwater
- LF-FW-P13 – Preserving natural character
- LF-FW-P14 – Restoring natural character
- LF-LS-O11 – Land and soil

119. Ms King considers that there are minor effects on cultural values and Te Mana o te Wai<sup>6</sup>, primarily because of the nature of the activity being water abstraction in a losing and gaining waterbody, the quantity of which will affect the concept of ki uta ki tai. However, I'm a little unclear on her position as at some points in the s42A report<sup>7</sup> she concludes that the recommended residual and minimum flows will ensure connection from mountains to sea and mitigate effects on natural character and in turn the mauri of the waterbody.

120. Overall Ms King considers the proposed activity to be inconsistent with Objective LF-WAI-O1 and Policies LF-WAI-P1 to LF-WAI-P4.

121. As outlined in paragraphs [88] to [94], I consider that the proposed flow regime:

- prioritises the health and wellbeing of the Pig Burn and its freshwater ecosystems before other uses;

---

<sup>6</sup> Section 7.7 of the s42A report

<sup>7</sup> Section 8.7, page 58

- will retain connectedness akin to the Pig Burn's natural gaining and losing pattern;
  - responds to the connections and interactions between surface water and groundwater;
  - has considered any mahika kai values and habitats that may be present; and
  - represents a step towards restoring mauri, and whether further steps are required can be implemented through the LWRP which will align with the Taieri FMU vision and 2050 date to achieve this.
122. Overall, while I agree that there will be minor effects on cultural values because water is being abstracted from the Pig Burn, I do not agree that any abstraction will compromise Te Mana o te Wai as this requires balance to be restored with health of freshwater placed first (paragraph [88]).
123. LF-VM-O4 sets out the vision for the Taieri FMU. This sets a timeframe of 2050 to achieve this vision. This proposed consent duration is consistent with this objective as it will allow for the applicants to implement the first step in the direction of overall freshwater improvements for the Pig Burn and Taieri catchment. Alignment of the consent expiry with the MIC consents further supports the ability to slowly transition the management of the Taieri catchment's land and water resources over time and in an integrated way (LF-VM-O7).
124. The proposed flow regime is consistent with the outcomes sought under LF-FW-O8 and LF-FW-P7 as these matters have been considered as a priority in the design of the abstractions and residual flows. Specific attributes or limits for the Pig Burn and Taieri catchment that may be set within the LWRP can be implemented either through review of these permits, or at the time of their expiry, which will still be within the life of the plan, and within the timeframe set to achieve the overall FMU vision (by 2050).

125. The preservation and restoration of the natural character of the Pig Burn has been considered in the design of the proposed flow regime which recognises the natural gaining and losing reaches and higher spring flow patterns. Based on the evidence of Mr Hickey and Dr Olsen, I consider that the proposal is consistent with the matters identified in policies LF-FW-P13 and LF-FW-P14.
126. Overall, I consider that the proposed activities are generally consistent with the Objectives and Policies of the P-ORPS 2021 which has been developed as an NPSFM compliant planning document.

### **Regional Plan Water: Otago**

127. I generally agree with the assessment of the relevant provisions of the Regional Plan Water (RPW) provided in the application and the s42A report, and the overall conclusion reached that the application is consistent with the provisions of the RPW, with the exception of the points raised below.
128. Ms King concludes in Section 7.7 of the s42A report that effects on cultural values are minor and therefore the application is inconsistent with Objective 5.3.2. I agree with this overall conclusion from an effects perspective, but I do not agree that these minor effects therefore give rise to the application being inconsistent with the provisions of the RPW.
129. This Objective specifically references Schedule 1D, which in contrast to Ms King's opinion<sup>8</sup>, does differentiate the Pig Burn from the Taieri River as it is one of the "*streams on the west facing slopes of the Rock and Pillar Range*"<sup>9</sup>.
130. For these streams only waahi taoka and mahika kai values are mentioned in Schedule 1D. These are defined as:
- *Waahi taoka – treasured resource; values, sites and resources that are valued and reinforce the special relationship Kai Tahu have with Otago's water resources*

---

<sup>8</sup> Section 7.7 of the s42A report

<sup>9</sup> Schedule 1D of the RPW, page 20-54, Maniototo subregion table

- *Mahika kai – places where food is procured or produced. Examples in the case of waterborne mahika kai include eels, whitebait, kanakana (lamprey), kokopu (galaxiid species), kōura (fresh water crayfish), fresh water mussels, indigenous waterfowl, watercress and raupō.*

131. Aukaha have not identified any specific waahi taoka sites along the Pig Burn and I consider the assessments provided by Mr Allibone and Dr Olsen confirm that there are no mahika kai species that would be available for harvesting present in the Pig Burn. In addition, the proposed flow regime will enhance cultural values of the Pig Burn from the current state through the reduction in abstraction and inclusion of various residual flows. I therefore consider that the application is consistent with Objective 5.3.2.
132. In respect of Ms King's assessment of Policy 6.4.2A, as the rates and volumes recommended in the s42A report are accepted as representing historic use, this proposal is consistent with this policy.

#### **Proposed Plan Change 7**

133. Proposed Plan Change 7 (PPC7) was notified on 18 March 2020, after these applications were lodged and so is not addressed in the application.
134. I have reviewed the assessment of the PPC7 provisions in the S42A report and agree with the conclusions reached.
135. The matters identified in Policy 10A.2.1(a) to (e) are all met, in particular no additional areas of land are proposed to be irrigated under these replacement consents.
136. I note that PPC7 does not give effect to the NPSFM and the ORC have been clear throughout the planning process that it will not provide for any improvements in the environment over a period of at least 6 years. However, in its current form, where applications can demonstrate no more than minor adverse effects on the ecology and hydrology of the surface water body (and any connected groundwater), consent durations of up to 14 years are in step with the direction of PPC7.



137. Whilst Rule 10A.3.2.1 does not explicitly apply due to the timing of this application's lodgement, the PWUG proposes a number of mitigation measures that will ensure that effects on the ecology and hydrology of the Pig Burn catchment will be no more than minor and seeks a duration (expiring 1 January 2034) that aligns with the direction in Policy 10A.2.3.
138. In addition, through the proposed reduction in allocation volumes, introduction of residual and minimum flows, and by aligning with the expiry of the MIC permits, this application represents a significant step in the transition towards the long-term sustainable management of surface water resources in the Taieri catchment as sought by the first part of Objective 10A.1.1.

### **Iwi Management Plans**

139. The Te Rūnanga o Ngāi Tahu Freshwater Policy Statement (NTFWP) has status as an iwi management plan, to complement and be read alongside the Kai Tahu Ki Otago Natural Resource Management Plan (NRMP).
140. In terms of integrated management, whilst this document is mostly directed at the organisational level, the policy statement confirms that catchment management planning is the preferred approach. This includes catchment-specific strategies as providing a better basis for achieving integrated sustainable management of natural and physical resources.
141. These applications encompass all the water takes in the Pig Burn catchment and the locations and rates of take, and appropriate minimum and residual flows have been developed at the catchment scale in order to maintain the natural character and flow regime of the Pig Burn and protect instream values. In addition, the inclusion of the Taieri River minimum flow, and aligning the expiry date with the MIS expiry provides for more integrated management within the wider catchment as well.
142. The NTFWP outlines that where Ngāi Tahu values have been identified, they should be maintained as a minimum, but preferably enhanced. Particular consideration of the mauri (life force) of the subject creek has

been given throughout the application and evidence, as demonstrated through the assessment of the effects of the activity on the hydrology, ecology and natural character of the creek. I consider that while specific Māori freshwater values associated with the Pig Burn have not been identified, the proposal may still have an effect on mauri, it will enhance the current state of mauri overall.

143. Ms King concludes in section 8.9, page 68, that overall the application is generally inconsistent with the objectives and policies of the NTFWP.
144. As discussed in earlier sections of my evidence, I do not agree that the proposal is inconsistent with the NTFWP provisions as the mauri of the Pig Burn will start to be restored through the proposed flow regime (Objective 6.2), priority has been given to the health and wellbeing of the freshwater resource (Policy 6.2(2)), mahinga kai values and habitats have been considered (Objective 6.3) and a catchment management planning approach to achieve integrated management has been adopted (Policy 6.2(3)).

## **Part 2**

145. I agree with conclusions reached in the application and the S42A report, that the proposed activity meets the purpose of the Act and provides for the matters in Section 6, whilst also being consistent with the matters in Section 7.
146. I note that Section 8 was not considered in the original application, however the s42A report provides an assessment on whether the principles of Te Tiriti of Waitangi have been taken into account. I generally agree with the s42A report conclusions, however I consider that steps to restore the mauri of the water body have been included in the application through the development of the proposed flow regime which addresses the principle of active protection.

## **Proposed Conditions of Consent**

147. There are a number of amendments to the recommended conditions attached as Appendix 1 to the s42A report. These have been shown as track changes in my Attachment A.

148. The majority of these amendments have been discussed throughout my evidence, however I provide the following summary of proposed changes to recommended consent conditions here:

- RM20.039.06: amend all references of 'Concept/Sophic' to 'Sophic Trust'.
- RM20.039.01: add the following legal description of land where water is to be used by Janine Ruth Smith: Section 1 Block IV Upper Taieri Survey District, Lot 1 Deposited Plan 415149, Section 14 Block IV Upper Taieri Survey District.
- RM20.039.06: remove Condition 11 requiring the Consent Holder to convert an area on the property to spray within a 5 year period.
- RM20.039.06: delete Appendix 2, and amend Condition 4 to remove the reference to Appendix 2 and enable the taking of water by all three parties at the same time as sought in the application. I understand from discussions with Ms King that this was a misunderstanding in her s42A report.
- RM20.039.03 & RM20.039.05: amend fish screen condition to enable timing to be prior to the 2023 irrigation season (1 October 2023).
- RM20.039.04 & RM20.039.06: Remove the fish screen condition on each permit. Amend timing for the installation of the residual flow measuring device to 1 October 2023.
- RM20.039.07: amend fish screen condition to enable timing to be prior to the 2023 irrigation season (1 October 2023). Amend timing for the installation of the residual flow measuring device to 1 October 2023.
- RM20.039.01-07: amend the Water Efficiency Report condition on each permit so that the provision of such a report be required at 5 yearly intervals, rather than annually, or may be replaced by the provision of a Certified Freshwater Farm Plan.

- RM20.039.01-07: amend the term of consent on each permit from 31 December 2035 to 1 January 2034.

### **Conclusion**

149. Overall, I consider that granting this application as proposed with a term expiring 1 January 2034 and the mitigation outlined in evidence and provided for in the consent conditions in Attachment A, will ensure that substantial and immediate improvements are realised in the Pig Burn and wider Taieri catchment through:

- The reduction in historic allocation;
- Amendments to the locations of take to retain the natural character and ensure naturally perennial reaches of the stream are restored;
- Inclusion of higher “flow harvesting” residual flows that will provide for trout spawning habitat;
- Installation of fish screens where appropriate to prevent entrainment of fish into the intakes;
- Additional residual flows at Takes 5, 6 and 7 to provide for instream values and improve the mauri of the waterbody;
- Compliance with the minimum flow on the Taieri River at Waipiata will ensure increased flows from the Pig Burn contribute to the wider catchment at times of low flow.

150. In addition, by aligning the expiry with the MIC who take a substantial volume of water in the Taieri River and control the residual/minimum flows along some of its length, an integrated management approach can be taken during the next renewal process to ensure that these activities align with any future LWRP flow and allocation regime, if not reviewed sooner.

A handwritten signature in blue ink, appearing to read 'CP', is positioned above a solid horizontal line.

**Claire Perkins**

**31 August 2021**

**ATTACHMENT A – PROPOSED CONSENT CONDITIONS WITH  
AMENDMENTS**



Our Reference: A151767

Consent No. RM20.039.01

### WATER PERMIT

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

Name: Natasha Lee Burrell, Ian Joseph Burrell and Canterbury Trustees (2016) Limited being trustees of the Duncan Cleugh Farming Trust (Names of trustees updated 1 October 2018) (1/3 share)

Address: c/- Polson Higgs, 139 Moray Place, Dunedin

Name: Pig Burn Gorge Limited (1/3 share)

Address: Andrew P Hayes Limited, Central Chambers, 19 Eden Street, Oamaru

Name: Janine Ruth Smith (1/3 share)

Address: c/- Fraser MacDonald Martin & Co, 13 Pery Street, Ranfurly

To take and use surface water as primary allocation from an unnamed tributary of the Pig Burn, and to retake from a tributary of the Taieri River known locally as Harpers Creek for the purpose of irrigation, domestic use and stock drinking water

For a term expiring ~~31 December 2035~~ 01 January 2034

Location of Point of Abstraction: Take: Unnamed tributary of the Pig Burn, Rock and Pillar Range, approximately 7 kilometres south of the intersection of Roberts Road and Hamiltons Road.  
Retake: Unnamed tributary of the Taieri River known locally as Harpers Creek, approximately 2.25 kilometres south west of the intersection of Roberts Road and Hamiltons Road

Legal Description of land at point of abstraction: Lease under s83 Land Act 1948, 1/1, Run 204D

Legal Description of land (s) where water is to be used: Pig Burn Gorge Limited: Section 18 Block IV Upper Taieri Survey District, Section 6 Block IV Upper Taieri Survey District

Duncan Cleugh Farming Trust: Part Section 23 Block IV Upper Taieri Survey District and Section 2 Block VIII Upper Taieri Survey District  
Smith: Section 1 Block IV Upper Taieri Survey District, Lot 1 Deposited Plan 415149, Section 14 Block IV Upper Taieri Survey District

Janine Ruth Smith: [Section 1 Block IV Upper Taieri Survey District, Lot 1 Deposited Plan 415149, Section 14 Block IV Upper Taieri Survey District](#)



Map Reference at  
point of abstraction  
(NZTM2000):

Take from Pig Burn: E1372797 N4978227  
Re-take from Harpers Creek: E1372426 N4983118

**Conditions**





### Specific

1. This consent must not commence until Consents 2000.136, 2000.244 and 2000.245 have been surrendered or expired.
2. The take and use of surface water as primary allocation from an unnamed tributary of the Pig Burn and the retake of primary allocation water from Harpers Creek at the map reference(s) specified above and the land legally described above for irrigation, domestic use and stock drinking water must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM20.039.01.
  - a) Application form, and assessment of environmental effects dated 12 February 2020;
  - b) Further information was requested on 24 February 2020 and a response was received on 3 April 2020; and
  - c) Amended application 11 September 2020.If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.
3. The rate and quantity of abstraction as primary allocation from the Pig Burn and then retaken from the unnamed tributary of Pig Burn must not exceed:
  - a) 56 litres per second; and
  - b) 500,000 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year.
4. No abstraction, other than for reasonable domestic and stock drinking water purposes, must occur when flows in the Taieri River are less than the minimum flow of 1000 litres per second at the Taieri River at Waipiata flow monitoring site MS5. When the minimum flow is reached, water must not be used for other uses such as domestic irrigation, car washing or filling spas or swimming pools.
5. A continuous connected residual flow must be maintained at all times immediately downstream of the point of take at NZTM 2000 E1372797 N4978227 on the Pig Burn at all times when the Consent Holder is exercising this consent to abstract water.

### Performance Monitoring

6. The Consent Holder must maintain a:
  - i. Water meter(s) that which will measure the rate and the volume of water taken to within an accuracy of +/- 5% at NZTM E1372449 N4983161. The water meter must be capable of output to a datalogger.
  - ii. a datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken.
  - iii. a telemetry unit which sends all of the data to the Consent Authority.
- a) The Consent Holder must provide telemetry data once daily to the Consent Authority. The Consent Holder must ensure data compatibility with the Consent Authority's time-series database and conform with Consent Authority's data standards.



- b) Within 20 working days of the installation of the datalogger/ telemetry unit, any subsequent replacement of the datalogger/ telemetry unit and at five yearly intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
  - i. Each device is installed in accordance with the manufacturer's specifications;
  - ii. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and
  - iii. that the water meter has been verified as accurate.
- c) The datalogger/telemetry unit must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
- d) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.
- e) The Consent Holder must report any malfunction of the datalogger/telemetry unit to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired within 10 working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including photographic evidence, to the Consent Authority within 5 working days of the completion of repairs.

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.

The water meter, data logger and telemetry unit should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.

- 7. i) A water use efficiency report must be provided to the Consent Authority every five years, starting 2026. ~~31 July each year for the period commencing 4 July the previous year and ending 30 June the current year.~~ The report must assess the water use over the previous ~~4260~~ months in respect of the efficient use of water for the purpose(s) consented. This report must include, but not be limited to:
  - a) Area, and crop type irrigated including a scaled map, aerial photo (or Google Earth image) of the irrigated areas, ~~number of harvests per year, and timing;~~
  - b) Annual summary of the monthly volume of water abstracted from Unnamed tributary of Pig Burn;
  - c) Reasons why use may have varied from the previous five year period;
  - 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 year;
  - e) Any changes or modifications to irrigation (and water conveyance) infrastructure;
  - f) A description of water use efficiency or conveyance upgrades that have taken place since the commencement of this consent including any:
    - (i) Upgrades to existing open races which may including piping;



- (ii) Establishment of any water storage infrastructure;
- g) A description of water use efficiency or conveyance upgrades that are planned within the next 53 years and the timeframes proposed for their implementation; and
- h) Water conservation steps taken.

ii) The water efficiency report in (i) may be replaced by a Certified Freshwater Farm Plan that has been prepared in accordance with Part 9A of the Resource Management Act 1991, once these are required under the legislation.

### General

8. The Consent Holder must ensure that at all times:
- a) There is no leakage from pipes and structures;
  - b) The use of water is confined to targeted areas, Appendix 1; and
  - c) That the volume of water used for irrigation does not exceed that required for the soil to reach field capacity and avoids the use of water onto non-productive land such as impermeable surfaces; and
  - d) That irrigation to land must not occur when the moisture content of the soils is at or above field capacity.

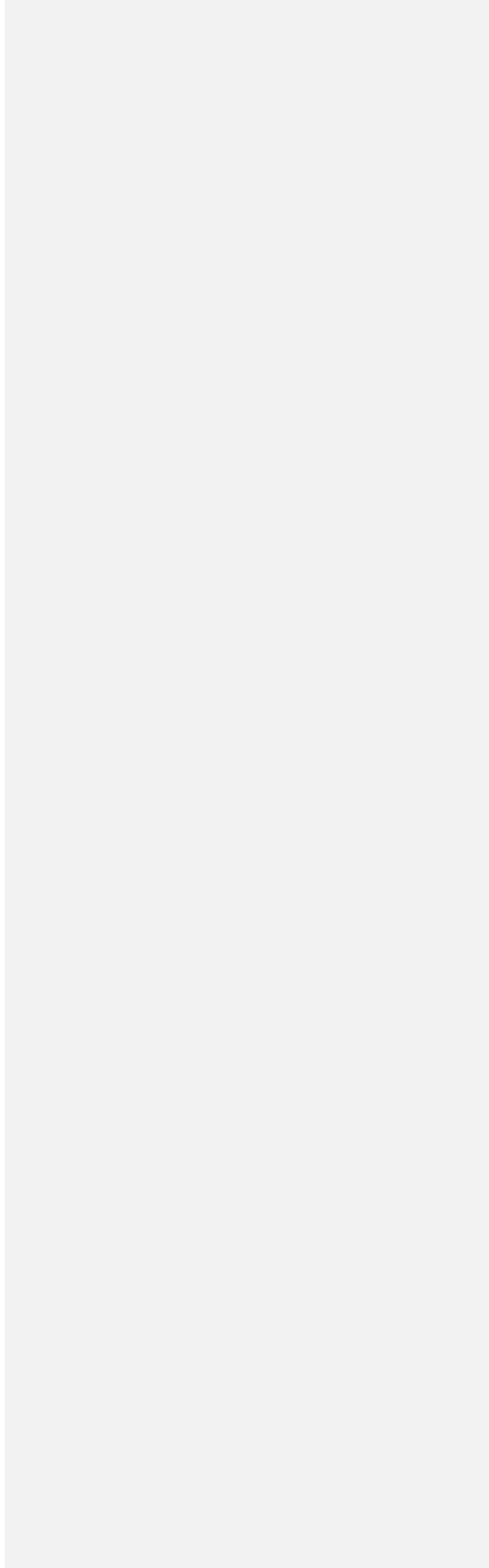
Note: Field Capacity is the amount of water that is able to be held in the soil after excess water has run off.

### Review

9. 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 during the period of three months either side of the date of granting of this consent each year, 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 regional 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:
    - a) the results of previous monitoring carried out under this consent and/or:
      - I. water availability, including alternative water sources;
      - II. actual and potential water use;
      - III. surface water flow and level regimes;
      - IV. groundwater or surface water quality;
      - V. efficiency of water use;
      - VI. Instream biota, including fish passage and the functioning of aquatic ecosystems; or
      - VII. new requirements for measuring, recording and transmission;



***Notes to Consent Holder***





1. Under section 125 of the Resource Management Act 1991, this consent lapses 5 years after the date of commencement of the consent unless:
  - a) The consent is given effect to; or
  - b) The Consent Authority extends the period after which the consent lapses.

2. Section 126 of the Resource Management Act 1991 provides that the Consent Authority may cancel this consent by written notice served on the Consent Holder if the consent has been exercised in the past but has not been exercised during the preceding five years.

*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 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.*

3. Where information is required to be provided to the Consent Authority in condition/s 6 and 7 this is provided in writing to [watermetering@orc.govt.nz](mailto:watermetering@orc.govt.nz), and the email heading is to reference RM20.039.01 and the condition/s the information relates to.

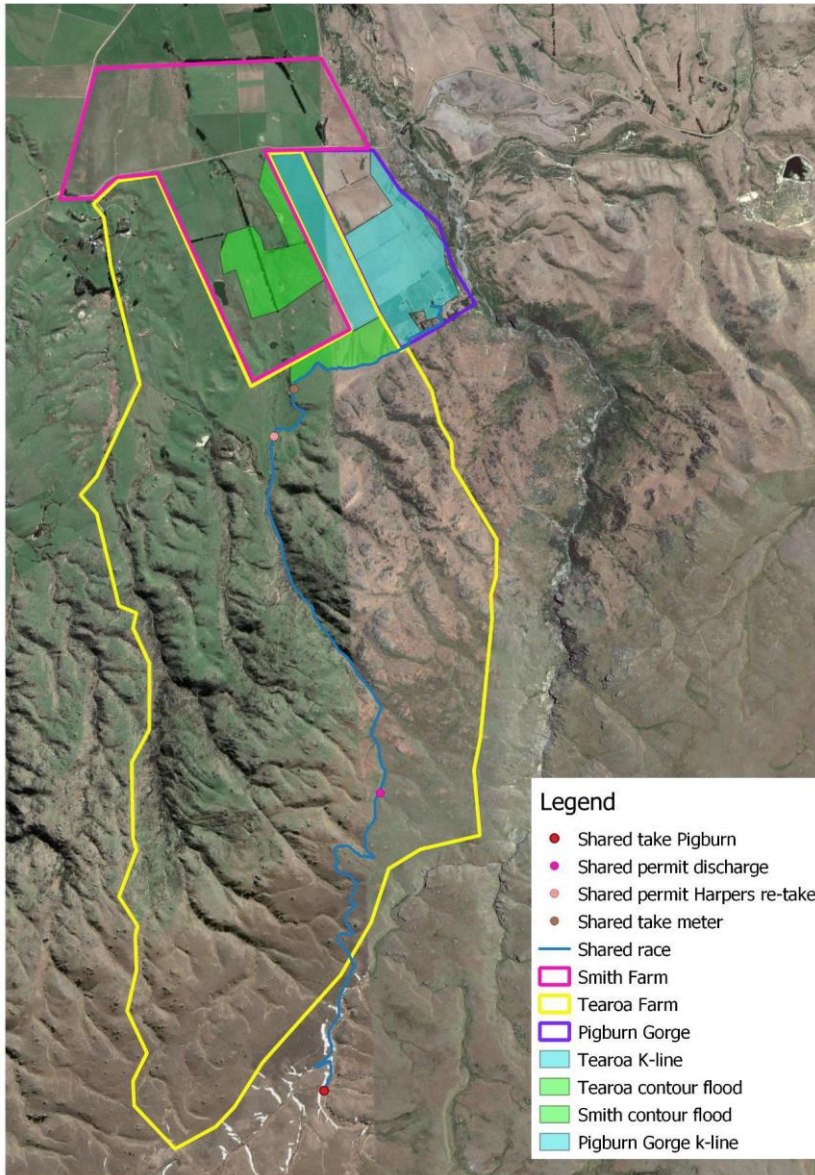
*It is the responsibility of the consent holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the New Zealand Drinking Water Standards.*

4. Water may be taken at any time for reasonable domestic or stock water purposes where and the taking or use does not, or is not likely to, have an adverse effect on the environment in accordance with Section 14 of the Resource Management Act 1991.
5. The Consent Holder is responsible for accessing all relevant water flow information including the flow phone or the Consent Authority's website information to comply with the minimum flow(s) set out in Condition 4.
6. This permit is subject to Water Metering Exemption WEX0238.

Issued at Dunedin this day of

Joanna Gilroy  
**Manager Consents**

Appendix 1. Irrigation Area





Our Reference: A1515767

Consent No. RM20.039.02

### WATER PERMIT

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

Name: EN Hakkore Limited

Address: Deloitte Touche Tohmatsu, Level 8, Otago House, 481 Moray Place, Dunedin

To take and use surface water as primary allocation from the Pig Burn for the purpose of irrigation, stock drinking water and domestic supply.

For a term expiring ~~31 December 2035~~ 1 January 2034

Location of Point of Abstraction: Pig Burn, Rock and Pillar Range, approximately 3.6 kilometres south east of the of the intersection of Roberts Road and Hamiltons Road

Legal Description of land at point of abstraction: Reserve through Part Run 204B Block I Rock & Pillar SD

Legal Description of land (s) where water is to be used: Sec 64 Block I and Section 65 Block I Rock & Pillar SD and Part Sec 66, 81 Block I Rock & Pillar SD

Map Reference at point of abstraction (NZTM2000): E1374521 N4981919

#### Conditions

#### Specific

1. This consent must not commence until Consent 2002.0101 has been surrendered or has expired.
2. The take and use of surface water as primary allocation from Pig Burn at the map reference specified above and the land legally described above for irrigation, domestic supply and stock water must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM20.039.02.
  - a) Application form, and assessment of environmental effects dated 12 February 2020;
  - b) Further information was requested on 24 February 2020 and a response was received on 3 April 2020; and
  - c) Amended application 11 September 2020.

If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.



3. The rate and quantity of abstraction as primary allocation from the Pig Burn must not exceed:
  - a) 7 litres per second;
  - b) 18,600 cubic metres per month; and
  - c) 70,000 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year.
4. No abstraction, other than for reasonable domestic and stock drinking water purposes, must occur when flows in the Taieri River are less than the minimum flow of 1000 litres per second at the Taieri River at Waipiata flow monitoring site MS5. When the minimum flow is reached, water must not be used for other uses such as domestic irrigation, car washing or filling spas or swimming pools.
5. The Consent Holder must maintain a mesh fish screen across the full width of the intake to ensure that fish and fish fry are prevented from passing through the intake screen. The fish screen must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.

#### **Performance Monitoring**

6.
  - a) The Consent Holder must maintain a:
    - i. Water meter(s) that which will measure the rate and the volume of water taken to within an accuracy of +/- 5% at NZTM 2000 E1375887 N4984873. The water meter must be capable of output to a datalogger.
    - ii. a datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken.
    - iii. a telemetry unit which sends all of the data to the Consent Authority.
  - b) The Consent Holder must provide telemetry data once daily to the Consent Authority. The Consent Holder must ensure data compatibility with the Consent Authority's time-series database and conform with Consent Authority's data standards.
  - c) Within 20 working days of the installation of the datalogger/telemetry unit, any subsequent replacement of the telemetry unit and at five yearly intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
    - i. Each device is installed in accordance with the manufacturer's specifications;
    - ii. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and
    - iii. that the water meter has been verified as accurate.
  - d) The datalogger/telemetry unit must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
  - e) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.
  - f) The Consent Holder must report any malfunction of the datalogger/telemetry unit to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired





within 10 working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including photographic evidence, to the Consent Authority within 5 working days of the completion of repairs.

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.

The water meter, data logger and telemetry unit should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.

7. The fish screen required by Condition 5 must be maintained in good working order, to ensure that the screen is performing. Records must be kept of all inspections and maintenance and these should be made available to the Consent Authority, on request.
8. i) A water use efficiency report must be provided to the Consent Authority ~~every five years, starting 2026, by 31 July each year for the period commencing 1 July the previous year and ending 30 June the current year.~~ The report must assess the water use over the previous ~~60~~<sup>60+2</sup> months in respect of the efficient use of water for the purpose(s) consented. This report must include, but not be limited to:
  - a) Area, and crop type irrigated including a scaled map, aerial photo (or Google Earth image) of the irrigated areas, ~~number of harvests per year, and timing;~~
  - b) Annual summary of the monthly volume of water abstracted from Unnamed tributary of Pig Burn;
  - c) Reasons why use may have varied from the previous five year period;
  - 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 year;
  - e) Any changes or modifications to irrigation (and water conveyance) infrastructure;
  - f) A description of water use efficiency or conveyance upgrades that have taken place since the commencement of this consent including any:
    - (i) Upgrades to existing open races which may including piping;
    - (ii) Establishment of any water storage infrastructure;
  - g) A description of water use efficiency or conveyance upgrades that are planned within the next ~~5~~<sup>53</sup> years and the timeframes proposed for their implementation; and
  - h) Water conservation steps taken.

ii) The water efficiency report in (i) may be replaced by a Certified Freshwater Farm Plan that has been prepared in accordance with Part 9A of the Resource Management Act 1991, once these are required under the legislation.

#### General

9. The Consent Holder must ensure that at all times:
  - a) There is no leakage from pipes and structures;
  - b) The use of water is confined to targeted areas, Appendix 1; and
  - c) That the volume of water used for irrigation does not exceed that required for the soil to reach field capacity and avoids the use of



water onto non-productive land such as impermeable surfaces; and

- d) That irrigation to land must not occur when the moisture content of the soils is at or above field capacity.

Note: Field Capacity is the amount of water that is able to be held in the soil after excess water has run off.

### Review

10. 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 during the period of three months either side of the date of granting of this consent each year, 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:
  - e) 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;
  - f) Ensuring the conditions of this consent are consistent with any National Environmental Standards, relevant regional plans, and/or the Otago Regional Policy Statement;
  - g) Reviewing the frequency of monitoring or reporting required under this consent;
  - h) 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. groundwater or surface water quality;
    - VI. efficiency of water use;
    - VII. Instream biota, including fish passage and the functioning of aquatic ecosystems; or new requirements for measuring, recording and transmission;

### Notes to Consent Holder

1. *Under section 125 of the Resource Management Act 1991, this consent lapses 5 years after the date of commencement of the consent unless:*
  - a) *The consent is given effect to; or*
  - b) *The Consent Authority extends the period after which the consent lapses.*
2. *Section 126 of the Resource Management Act 1991 provides that the Consent Authority may cancel this consent by written notice served on the Consent Holder if the consent has been exercised in the past but has not been exercised during the preceding five years.*
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).*

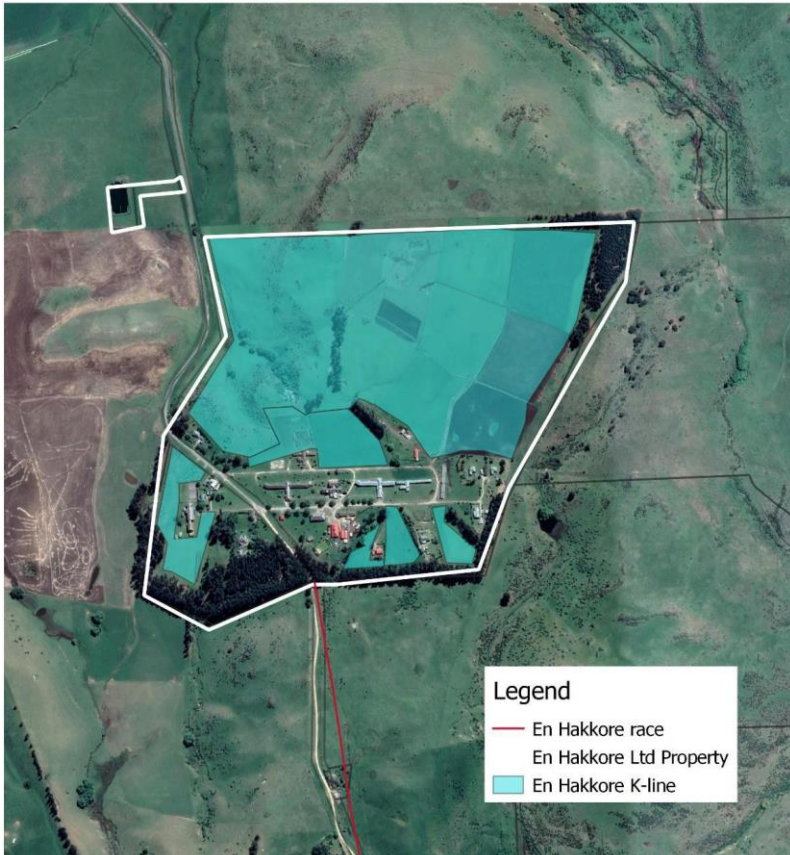
*Primary allocation may be lost if an application is not made at least 6 months prior to expiry and will be lost if an application is not made at least 3 months prior to expiry. A late application will likely result in the application being treated as supplementary allocation, if any such allocation is available.*

4. *Where information is required to be provided to the Consent Authority in condition/s 6, 7 and 8 this is provided in writing to [watermetering@orc.govt.nz](mailto:watermetering@orc.govt.nz) , and the email heading is to reference RM20.039.02 and the condition/s the information relates to.*
5. *It is the responsibility of the consent holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the New Zealand Drinking Water Standards.*
6. *Water may be taken at any time for reasonable domestic or stock water purposes where and the taking or use does not, or is not likely to, have an adverse effect on the environment in accordance with Section 14 of the Resource Management Act 1991.*
7. *The Consent Holder is responsible for accessing all relevant water flow information including the flow phone or the Consent Authority's website information to comply with the minimum flow(s) set out in Condition 4.*
8. *This permit is subject to Water Metering Exemption WEX0232.*

Issued at Dunedin this day of

Joanna Gilroy  
**Manager Consents**

Appendix 1. Irrigation Area





Our Reference: A1515767

Consent No. RM20.039.03

### **WATER PERMIT**

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

Name: Greenbank Pastoral Limited

Address: C/- Ibboston Cooney Limited, Level 1, 69 Tarbert Street, Alexandra

To take and use surface water as primary allocation from the Pig Burn for the purpose of irrigation, stock drinking water and dairy shed use.

For a term expiring ~~31 December 2035~~ 1 January 2034

Location of Point of Abstraction: Pig Burn, Approximately 1.6 kilometres south east of the intersection of Roberts Road and Hamilton Road, Patearoa

Legal Description of land at point of abstraction: Pt Run 204B

Legal Description of land (s) where water is to be used: Lot 2 DP 441480 Sec 13 Blk 4 Upper Taieri

Map Reference at point of abstraction (NZTM 2000): E1374119 N4983920

### **Conditions**

#### **Specific**

1. This consent must not commence until Consent 96394 has been surrendered or has expired.
2. The take and use of surface water as primary allocation from Pig Burn at the map reference specified above and the land legally described above for irrigation, dairy shed use and stock water must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM20.039.03.
  - a) Application form, and assessment of environmental effects dated 12 February 2020;
  - b) Further information was requested on 24 February 2020 and a response was received on 3 April 2020; and
  - c) Amended application 11 September 2020.If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.
3. The rate and quantity of abstraction as primary allocation from the Pig Burn must not exceed:
  - a) 42 litres per second;
  - b) 111,820 cubic metres per month; and



- c) 454,120 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year.
4. No abstraction, other than for reasonable domestic and stock drinking water purposes, must occur when flows in the Taieri River are less than the minimum flow of 1000 litres per second at the Taieri River at Waipiata flow monitoring site MS5. When the minimum flow is reached, water must not be used for other uses such as domestic irrigation, car washing or filling spas or swimming pools.
5. ~~Prior to exercising the consent~~By 30 June 2023, the Consent Holder must submit a fish screen design to the Consent Authority. The design certified by the Consent Authority must be installed at the point of take ~~prior to the first exercise of this consent~~by 1 October 2023. The fish screen must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.

#### Performance Monitoring

6. a) The Consent Holder must maintain a:
  - i. Water meter(s) that which will measure the rate and the volume of water taken to within an accuracy of +/- 10% at NZTM E1372488 N4985934 The water meter must be capable of output to a datalogger.
  - ii. a datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken.
  - iii. a telemetry unit which sends all of the data to the Consent Authority.
- b) The Consent Holder must provide telemetry data once daily to the Consent Authority. The Consent Holder must ensure data compatibility with the Consent Authority's time-series database and conform with Consent Authority's data standards.
- c) Within 20 working days of the installation of the datalogger/telemetry unit, any subsequent replacement of the telemetry unit and at five yearly intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
  - iv. Each device is installed in accordance with the manufacturer's specifications;
  - v. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and
  - vi. that the water meter has been verified as accurate.
- d) The datalogger/telemetry unit must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
- e) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.
- f) The Consent Holder must report any malfunction of the datalogger/telemetry unit to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired within 10 working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including



photographic evidence, to the Consent Authority within 5 working days of the completion of repairs.

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.

The water meter, data logger and telemetry unit should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.

7. The fish screen as required by Condition 5 must be maintained in good working order, to ensure the fish screen is performing as designed. Records must be kept of all inspections and maintenance and these should be available to the Consent Authority on request.
8. ~~i) A water use efficiency report must be provided to the Consent Authority every five years, starting 2026, by 31 July each year for the period commencing 1 July the previous year and ending 30 June the current year.~~ The report must assess the water use over the previous ~~60~~42 months in respect of the efficient use of water for the purpose(s) consented. This report must include, but not be limited to:
  - a) Area, ~~and~~ crop type irrigated including a scaled map, aerial photo (or Google Earth image) of the irrigated areas, ~~number of harvests per year, and timing;~~
  - b) Annual summary of the monthly volume of water abstracted from Unnamed tributary of Pig Burn;
  - c) Reasons why use may have varied from the previous ~~five year period;~~
  - 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 year;
  - e) Any changes or modifications to irrigation (and water conveyance) infrastructure;
  - f) A description of water use efficiency or conveyance upgrades that have taken place since the commencement of this consent including any:
    - (i) Upgrades to existing open races which may including piping;
    - (ii) Establishment of any water storage infrastructure;
  - g) A description of water use efficiency or conveyance upgrades that are planned within the next ~~35~~ years and the timeframes proposed for their implementation; and
  - h) Water conservation steps taken.

ii) The water efficiency report in (i) may be replaced by a Certified Freshwater Farm Plan that has been prepared in accordance with Part 9A of the Resource Management Act 1991, once these are required under the legislation.

## General

9. The Consent Holder must ensure that at all times:
  - a) There is no leakage from pipes and structures.
  - b) The use of water is confined to targeted areas, Appendix 1 and
  - c) That the volume of water used for irrigation does not exceed that required for the soil to reach field capacity and avoids the use of water onto non-productive land such as impermeable surfaces; and
  - d) That irrigation to land must not occur when the moisture content of the soils is at or above field capacity.



Note: Field Capacity is the amount of water that is able to be held in the soil after excess water has run off.

## Review

10. 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 during the period of three months either side of the date of granting of this consent each year, 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 regional 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. groundwater or surface water quality;
    - VI. efficiency of water use;
    - VII. Instream biota, including fish passage and the functioning of aquatic ecosystems; or new requirements for measuring, recording and transmission;

## Notes to Consent Holder

1. *Under section 125 of the Resource Management Act 1991, this consent lapses 5 years after the date of commencement of the consent unless:*
  - a) *The consent is given effect to; or*
  - b) *The Consent Authority extends the period after which the consent lapses.*
2. *Section 126 of the Resource Management Act 1991 provides that the Consent Authority may cancel this consent by written notice served on the Consent Holder if the consent has been exercised in the past but has not been exercised during the preceding five years.*
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).

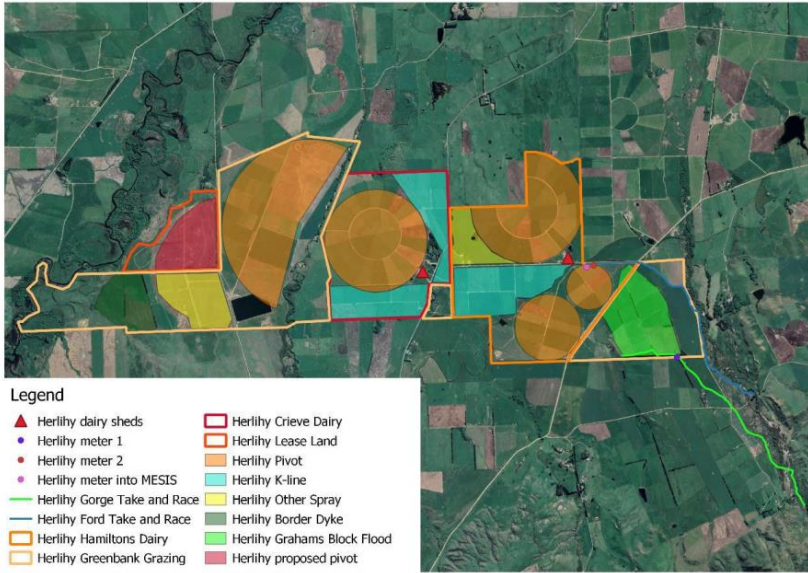
Primary allocation may be lost if an application is not made at least 6 months prior to expiry and will be lost if an application is not made at least 3 months prior to expiry. A late application will likely result in the application being treated as supplementary allocation, if any such allocation is available.

4. Where information is required to be provided to the Consent Authority in condition/s 6,7 and 8 this is provided in writing to [watermetering@orc.govt.nz](mailto:watermetering@orc.govt.nz) , and the email heading is to reference RM20.039.03 and the condition/s the information relates to.
5. It is the responsibility of the consent holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the New Zealand Drinking Water Standards.
6. Water may be taken at any time for reasonable domestic or stock water purposes where and the taking or use does not, or is not likely to, have an adverse effect on the environment in accordance with Section 14 of the Resource Management Act 1991.
7. The Consent Holder is responsible for accessing all relevant water flow information including the flow phone or the Consent Authority's website information to comply with the minimum flow(s) set out in Condition 4.
8. This permit is subject to Water Metering Exemption WEX0063.

Issued at Dunedin this day of

Joanna Gilroy  
**Manager Consents**

Appendix 1. Irrigation Area





Our Reference: A1515767

Consent No. RM20.039.04

### **WATER PERMIT**

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

Name: Hamiltons Dairy Limited

Address: C/- Ibbotson Cooney Ltd, 69 Tarbert Street, Alexandra

To take and use surface water as primary allocation from the Pig Burn for the purpose of irrigation, dairy shed use and stock drinking water

For a term expiring ~~31 December 2035~~ January 2034

Location of Point of Abstraction: Pig Burn, immediately adjacent to Hamilton Road, approximately 348 metres north east of the intersection of Hamilton Road and Roberts Road, Patearoa.

Legal Description of land at point of abstraction: Pt Run 204B

Legal Description of land (s) where water is to be used: Lot 1 DP 397751, Lot 1 DP 431784, Lot 1 DP 500044 Sec 48 Blk 1 Sec 12, Blk II Upper Taieri SD, Sec 18 Blk XIII Maniototo SD, Lots 2-5,7-9 84DP 4317, Sec 4 SD 24830, Sec 7 Blk I Upper Taieri SD, Sec 14 Blk XIII Maniototo SD, Lot 2 DP 427338, Lot 1 DP 441480 Upper Taieiri SD

Map Reference at point of abstraction (NZTM2000): E1373417 N4985319

#### **Conditions**

#### **Specific**

1. This consent must not commence until Consent 96230.V1 has been surrendered or has expired.
2. The take and use of surface water as primary allocation from Pig Burn at the map reference specified above and the land legally described above for irrigation, dairy shed use and stock water must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM20.039.04.
  - a) Application form, and assessment of environmental effects dated 12 February 2020;
  - b) Further information was requested on 24 February 2020 and a response was received on 3 April 2020; and



c) Amended application 11 September 2020.

If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.

3. The rate and quantity of abstraction as primary allocation from the Pig Burn must not exceed:
  - a) 70 litres per second;
  - b) 177,017 cubic metres per month combined with RM20.039.06; and
  - c) 459,875 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year combined with RM20.039.06.
4. The Consent Holder must not take water under this consent at the same time as taking water under Water Permit RM20.039.06. This condition only applies to abstraction undertaken by Hamiltons Dairy Limited under Water Permit RM20.039.06.
5. The Consent Holder must maintain a residual flow of at least 70 litres per second below the intake on the Pig Burn at NZTM 2000 E1373417 N4985319 at all times when the Consent Holder is exercising this consent to abstract water.
6.
  - a) ~~Prior to exercising the consent~~By 30 June 2023, the Consent Holder must submit a residual flow measurement design to the Consent Authority;
  - b) The design certified by the Consent Authority must be installed immediately below the point of take ~~prior to the first exercise of this consent~~by 1 October 2023 to ensure the residual flow specified in Condition 5 can be maintained; and
  - c) The measurement must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.
7. No abstraction, other than for reasonable domestic and stock drinking water purposes, must occur when flows in the Taieri River are less than the minimum flow of 1000 litres per second at the Taieri River at Waipiata flow monitoring site MS5. When the minimum flow is reached, water must not be used for other uses such as domestic irrigation, car washing or filling spas or swimming pools.
8. ~~Prior to exercising the consent, the Consent Holder must install a fish screen across the instream intake to avoid fish ingress and uptake that complies with the following:~~
  - a) ~~The maximum water velocity into the entry point of the intake structure is no greater than 0.12 metres per second;~~
  - b) ~~The apertures on the intake screen are no greater than 3 millimetres side of square or no greater than 2 millimetres bar or slot width~~
  - c) ~~Sweeping velocity is equal or greater than approach velocity;~~

~~The fish screen must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.~~

#### Performance Monitoring

98. The Consent Holder must maintain a:
  - i. Water meter(s) that which will measure the rate and the volume of water taken to within an accuracy of +/- 5% at NZTM 2000

E1371293 N4987097 The water meter must be capable of output to a datalogger.

- ii. a datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken.
- iii. if telemetry is required a telemetry unit which sends all of the data to the Consent Authority.
- a) The Consent Holder must provide telemetry data once daily to the Consent Authority. The Consent Holder must ensure data compatibility with the Consent Authority's time-series database and conform with Consent Authority's data standards.
- b) Within 20 working days of the installation of the datalogger/telemetry unit, any subsequent replacement of the telemetry unit and at five yearly intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
  - i. Each device is installed in accordance with the manufacturer's specifications;
  - ii. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and
  - iii. that the water meter has been verified as accurate.
- c) The datalogger/telemetry unit must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
- d) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.
- e) The Consent Holder must report any malfunction of the datalogger/telemetry unit to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired within 10 working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including photographic evidence, to the Consent Authority within 5 working days of the completion of repairs.

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.

The water meter, data logger and telemetry unit should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.

~~10. The fish screen as required by Condition 8 must be maintained in good working order, to ensure the fish screen is performing as designed. Records must be kept of all inspections and maintenance and these should be available to the Consent Authority on request.~~

~~11. The authorised design to measure the residual flow required by Conditions 5 and 6 must be maintained in good working order to ensure the weir is performing as designed. Records must be kept of all inspections and maintenance and these should be available to the Consent Authority on request.~~

~~12. i) A water use efficiency report must be provided to the Consent Authority every 5 years, starting 2026, by 31 July each year for the period commencing 1 July the previous year and ending 30 June~~



the current year). The report must assess the water use over the previous ~~4260~~ months in respect of the efficient use of water for the purpose(s) consented. This report must include, but not be limited to:

- a) Area, ~~and~~ crop type irrigated including a scaled map, aerial photo (or Google Earth image) of the irrigated areas, ~~number of harvests per year, and timing;~~
- b) Annual summary of the monthly volume of water abstracted from Unnamed tributary of Pig Burn;
- c) Reasons why use may have varied from the previous ~~five year period;~~
- 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 year;
- e) Any changes or modifications to irrigation (and water conveyance) infrastructure;
- f) A description of water use efficiency or conveyance upgrades that have taken place since the commencement of this consent including any:
  - i. Upgrades to existing open races which may including piping;
  - ii. Establishment of any water storage infrastructure;
- g) A description of water use efficiency or conveyance upgrades that are planned within the next ~~5-3~~ years and the timeframes proposed for their implementation; and
- h) Water conservation steps taken.

ii) The water efficiency report in (i) may be replaced by a Certified Freshwater Farm Plan that has been prepared in accordance with Part 9A of the Resource Management Act 1991, once these are required under the legislation.

#### General

~~4311~~ The Consent Holder must ensure that at all times:

- a) There is no leakage from pipes and structures;
- b) The use of water is confined to targeted areas, Appendix 1 and
- c) That the volume of water used for irrigation does not exceed that required for the soil to reach field capacity and avoids the use of water onto non-productive land such as impermeable surfaces; and
- d) That irrigation to land must not occur when the moisture content of the soils is at or above field capacity.

Note: Field Capacity is the amount of water that is able to be held in the soil after excess water has run off.



## Review

4412 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 during the period of three months either side of the date of granting of this consent each year, 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 regional 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. groundwater or surface water quality;
  - VI. efficiency of water use;
  - VII. Instream biota, including fish passage and the functioning of aquatic ecosystems; or new requirements for measuring, recording and transmission;



### **Notes to Consent Holder**

1. *Under section 125 of the Resource Management Act 1991, this consent lapses 5 years after the date of commencement of the consent unless:
  - a) *The consent is given effect to; or*
  - b) *The Consent Authority extends the period after which the consent lapses.**
2. *Section 126 of the Resource Management Act 1991 provides that the Consent Authority may cancel this consent by written notice served on the Consent Holder if the consent has been exercised in the past but has not been exercised during the preceding five years.*
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).*

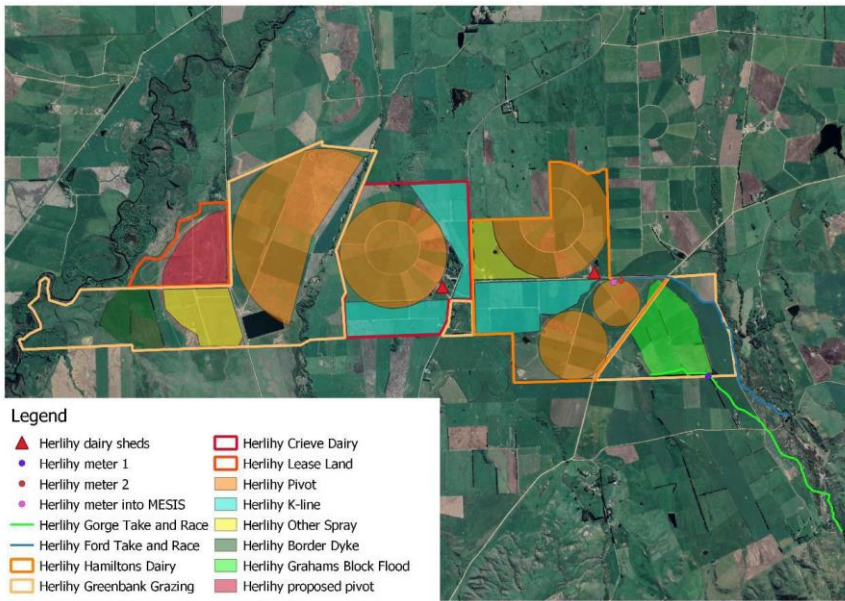
*Primary allocation may be lost if an application is not made at least 6 months prior to expiry and will be lost if an application is not made at least 3 months prior to expiry. A late application will likely result in the application being treated as supplementary allocation, if any such allocation is available.*
4. *Where information is required to be provided to the Consent Authority in condition/s 9,10,11 and 12 this is provided in writing to [watermetering@orc.govt.nz](mailto:watermetering@orc.govt.nz), and the email heading is to reference RM20.039.05 and the condition/s the information relates to.*
5. *It is the responsibility of the consent holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the New Zealand Drinking Water Standards.*
6. *Water may be taken at any time for reasonable domestic or stock water purposes where and the taking or use does not, or is not likely to, have an adverse effect on the environment in accordance with Section 14 of the Resource Management Act 1991.*
7. *The Consent Holder is responsible for accessing all relevant water flow information including the flow phone or the Consent Authority's website information to comply with the minimum flow(s) set out in Condition 7.*

Issued at Dunedin this day of

Joanna Gilroy  
**Manager Consents**



Appendix 1: Irrigation area





Our Reference: A1515767

Consent No. RM20.039.05

### **WATER PERMIT**

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

Name: Hamilton Runs Limited

Address: C/- Ibbotson Cooney Limited, Level 1, 69 Tarbert Street, Alexandra

To take and use surface water as primary allocation from the Pig Burn for the purpose of irrigation and stock drinking water

For a term expiring 1 January 2034 ~~31 December 2035~~

Location of Point of Abstraction: Pigburn, approximately 450m upstream of Hamilton's Road, Waipiata

Legal Description of land at point of abstraction: Crown land Blk IV Upper Taieri Survey District, SO 1827

Legal Description of land (s) where water is to be used: Secs 7,8, 9-10, 11, 21,22 Block IV Upper Taieri SD, Part Run 204b and Sec 25-26 Block IV Upper Taieri SD, Sec 16-18 and Part Sec 15 Block XIV Maniototo SD, Lot 2 DP 313479 and Sec 35 Block I and Secs 62, 67, 69, 71, 75-76, 79-80, 85-87, 89 Block I Rock & Pillar SD

Map Reference at point of abstraction (NZTM2000): E1373719 N4985082

#### **Conditions**

##### **Specific**

1. This consent must not commence until Consent 97210 has been surrendered or has expired.
2. The take and use of surface water as primary allocation from Pig Burn at the map reference specified above and the land legally described above for irrigation, domestic supply and stock water must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM20.039.05.
  - a) Application form, and assessment of environmental effects dated 12 February 2020;
  - b) Further information was requested on 24 February 2020 and a response was received on 3 April 2020; and
  - c) Amended application 11 September 2020.



If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.

3. The rate and quantity of abstraction as primary allocation from the Pig Burn must not exceed:
  - a) 56 litres per second;
  - b) 77,844 cubic metres per month; and
  - c) 465,044 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year.
4. No abstraction, other than for reasonable domestic and stock drinking water purposes, must occur when flows in the Taieri River are less than the minimum flow of 1000 litres per second at the Taieri River at Waipiata flow monitoring site MS5. When the minimum flow is reached, water must not be used for other uses such as domestic irrigation, car washing or filling spas or swimming pools.
5. ~~Prior to exercising the consent~~By 30 June 2023, the Consent Holder must submit a fish screen design to the Consent Authority. The design certified by the Consent Authority must be installed ~~at the point of take prior to the first exercise of this consent~~by 1 October 2023. The fish screen must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.

**Commented [B1]:** Final volumes to be updated following further review of correct data.

#### Performance Monitoring

6.
  - a) The Consent Holder must maintain a:
    - i. Water meter(s) that which will measure the rate and the volume of water taken to within an accuracy of +/- 10% at NZTM E1371293 N4987084. The water meter must be capable of output to a datalogger.
    - ii. a datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken.
    - iii. a telemetry unit which sends all of the data to the Consent Authority.
  - b) The Consent Holder must provide telemetry data once daily to the Consent Authority. The Consent Holder must ensure data compatibility with the Consent Authority's time-series database and conform with Consent Authority's data standards.
  - c) Within 20 working days of the installation of the datalogger/telemetry unit, any subsequent replacement of the telemetry unit and at five yearly intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
    - iv. Each device is installed in accordance with the manufacturer's specifications;
    - v. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and
    - vi. that the water meter has been verified as accurate.
  - d) The datalogger/telemetry unit must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
  - e) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.



- f) The Consent Holder must report any malfunction of the datalogger/telemetry unit to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired within 10 working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including photographic evidence, to the Consent Authority within 5 working days of the completion of repairs.

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.

The water meter, data logger and telemetry unit should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.

7. The fish screen as required by Condition 5 must be maintained in good working order, to ensure the fish screen is performing as designed. Records must be kept of all inspections and maintenance and these should be available to the Consent Authority on request.

8. i) A water use efficiency report must be provided to the Consent Authority every five years, starting 2026, by 31 July each year for the period commencing 1 July the previous year and ending 30 June the current year. The report must assess the water use over the previous 1260 months in respect of the efficient use of water for the purpose(s) consented. This report must include, but not be limited to:

- a) Area, and crop type irrigated including a scaled map, aerial photo (or Google Earth image) of the irrigated areas, number of harvests per year, and timing;
- b) Annual summary of the monthly volume of water abstracted from Unnamed tributary of Pig Burn;
- c) Reasons why use may have varied from the previous five year period;
- 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 year;
- e) Any changes or modifications to irrigation (and water conveyance) infrastructure;
- f) A description of water use efficiency or conveyance upgrades that have taken place since the commencement of this consent including any:
  - (i) Upgrades to existing open races which may including piping;
  - (ii) Establishment of any water storage infrastructure;
- g) A description of water use efficiency or conveyance upgrades that are planned within the next 53 years and the timeframes proposed for their implementation; and
- h) Water conservation steps taken.

ii) The water efficiency report in (i) may be replaced by a Certified Freshwater Farm Plan that has been prepared in accordance with Part 9A of the Resource Management Act 1991, once these are required under the legislation.

#### General

9. The Consent Holder must ensure that at all times:

- a) There is no leakage from pipes and structures;



- b) The use of water is confined to targeted areas, Appendix 1 and
- c) That the volume of water used for irrigation does not exceed that required for the soil to reach field capacity and avoids the use of water onto non-productive land such as impermeable surfaces; and
- d) That irrigation to land must not occur when the moisture content of the soils is at or above field capacity.

Note: Field Capacity is the amount of water that is able to be held in the soil after excess water has run off.

### Review

10. 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 during the period of three months either side of the date of granting of this consent each year, 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 regional 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. groundwater or surface water quality;
    - vi. efficiency of water use;
    - vii. Instream biota, including fish passage and the functioning of aquatic ecosystems; or new requirements for measuring, recording and transmission;

### Notes to Consent Holder

1. *Under section 125 of the Resource Management Act 1991, this consent lapses 5 years after the date of commencement of the consent unless:*
  - a) *The consent is given effect to; or*
  - b) *The Consent Authority extends the period after which the consent lapses.*
2. *Section 126 of the Resource Management Act 1991 provides that the Consent Authority may cancel this consent by written notice served on the Consent Holder if the consent has been exercised in the past but has not been exercised during the preceding five years.*



- 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).*

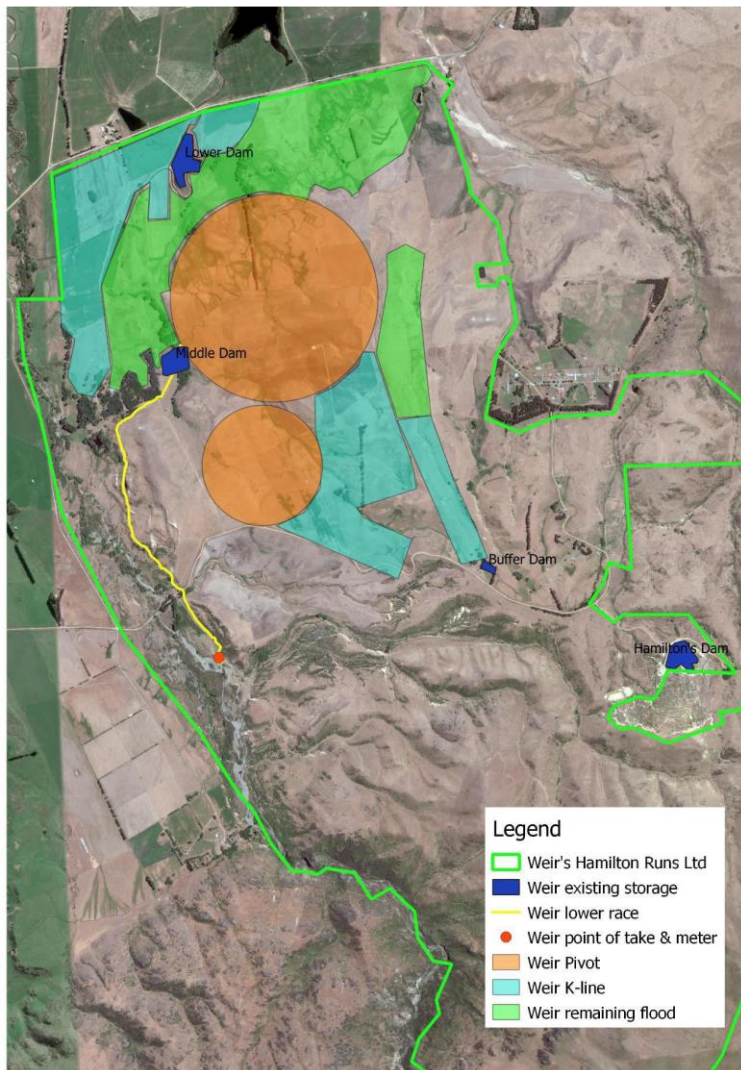
*Primary allocation may be lost if an application is not made at least 6 months prior to expiry and will be lost if an application is not made at least 3 months prior to expiry. A late application will likely result in the application being treated as supplementary allocation, if any such allocation is available.*

- Where information is required to be provided to the Consent Authority in condition/s 6, 7 and 8 this is provided in writing to [watermetering@orc.govt.nz](mailto:watermetering@orc.govt.nz), and the email heading is to reference RM20.039.05 and the condition/s the information relates to.*
- It is the responsibility of the consent holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the New Zealand Drinking Water Standards.*
- Water may be taken at any time for reasonable domestic or stock water purposes where and the taking or use does not, or is not likely to, have an adverse effect on the environment in accordance with Section 14 of the Resource Management Act 1991.*
- The Consent Holder is responsible for accessing all relevant water flow information including the flow phone or the Consent Authority's website information to comply with the minimum flow(s) set out in Condition 4.*

Issued at Dunedin this day of

Joanna Gilroy  
**Manager Consents**

### Appendix 1. Irrigation Area





Our Reference: A1515767

Consent No. RM20.039.06

### WATER PERMIT

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

Name: Christopher Patrick Mulholland and Dale Evelyn Mulholland

Address: 969 Ranfurly-Patearoa Road, RD 4, Ranfurly

Name: ~~Concept Farms Limited and~~ Sophic Trust

Address: CEG Limited, 110 Vogel Street, Dunedin and 949 Highcliff Rd, Dunedin

Name: Hamiltons Dairy Limited

Address: C/ Ibbotson Cooney Limited, Level 1, 69 Tarbert Street, Alexandra

To take and use surface water as primary allocation from the Pig Burn for the purpose of irrigation, stock drinking water and diary shed use.

For a term expiring ~~31 December 2035~~ 1 January 2034

Location of Point of Abstraction: Pig Burn, approximately 930 metres north northwest of the intersection of Roberts Road and Hamilton Road, Waipiata, Maniototo

Legal Description of land at point of abstraction: Marginal Strip (Crown land Blk IV Upper Taieri Survey District, SO12392) adjacent to Sec 25, Blk IV Upper Taieri Survey District.

Legal Description of land (s) where water is to be used: ~~Concept Farms Ltd~~ **Sophic Trust:** Sec 19, 31 and Pt Sec 32 Blk XIV Maniototo SD and Sec 2 SO 24830, Sec 11 and Sec 12 Blk XIV Maniototo SD, Secs 33 – 35 Blk XIV Maniototo SD, Sec 23 Blk XIV Maniototo SD, Pt Lot 3 DP 340765  
**Mulholland:** Sec 1 SO Plan 23520, Section 1 SO Plan 23521, Lot 1 DP 427338  
**Hamiltons Dairy Limited:** Lot 1 DP 397751, Lot 1 DP 431784, Lot 1 DP 500044 Sec 48 Blk 1 Sec 12, Blk II Upper Taieri SD, Sec 18 Blk XIII Maniototo SD, Lots 2-5,7-9 84DP 4317, Sec 4 SD 24830, Sec 7 Blk I Upper Taieri SD, Sec 14 Blk XIII Maniototo SD, Lot 2 DP 427338, Lot 1 DP 441480 Upper Taieri SD

Map Reference at point of abstraction (NZTM2000): E1372833 N4986146

### Conditions





**Specific**

1. This consent must not commence until Consents 96230.V1, 97128 and 2000.498 have been surrendered or expired.
2. The take and use of surface water as primary allocation from Pig Burn at the map reference specified above and the land legally described above for irrigation, domestic supply and stock water must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM20.039.06.
  - a) Application form, and assessment of environmental effects dated 12 February 2020;
  - b) Further information was requested on 24 February 2020 and a response was received on 3 April 2020; and
  - c) Amended application 11 September 2020.

If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.

3. The rate of abstraction as primary allocation from the Pig Burn must not exceed:
  - a) 60 litres per second combined total between Consent Holders when the residual flow specified in Condition 7 can be maintained;
  - b) 110 litres per second combined total between Consent Holders when the residual flow specified in Condition 8 can be maintained;
4. The quantity of abstraction as primary allocation from the Pig Burn must not exceed:

<b>Concept Farms Ltd/Sophic Trust</b>	148,800 cubic metres per month <del>on their month (specified in Appendix 2)</del>	816,519 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year. <del>on their year (specified in Appendix 2)</del>
<b>Mulholland</b>	114,000 cubic metres per month <del>on their month (specified in Appendix 2)</del>	768,615 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year. <del>on their year (specified in Appendix 2)</del>
<b>Hamiltons Dairy Limited</b>	117,017 cubic metres per month <del>on their month (specified in Appendix 2)</del>	459,875 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year. <del>on their year (specified in Appendix 2)</del> as a combined total with the annual volume authorised to be taken by Water Permit RM20.039.04.



5. Hamiltons Dairy Limited must only take water under this consent when flows immediately below the point of take authorised by Water Permit RM20.039.04 located at NZTM2000 E1373417 N4985319 are less than 70 litres per second.
6. Hamiltons Dairy Limited must not take water under this consent at the same time as taking water under Water Permit RM20.039.04. This condition only applies to abstraction undertaken by Hamiltons Dairy Limited, and does not affect the ability of ~~Sophic Trust Concept Farms Ltd~~ or Mulholland to take water under this consent.
7. ~~a) The Consent Holder must maintain a residual flow of at least 10 litres per second below the intake on the Pig Burn at NZTM 2000 E1372749 N4990742 at all times in the years 2021–2026 when the Consent Holder is exercising this consent to abstract water under Condition 3(a).~~  
~~b) a) In the years 2026–2035 the Consent Holder must maintain a residual flow of at least 20 litres per second below the intake on the Pig Burn at NZTM 2000 E1372749 N4990742 at all times when the Consent Holder is exercising this consent to abstract water under Condition 3(a).~~
8. The Consent Holder must maintain a residual flow of at least 200 litres per second below the intake on the Pig Burn at NZTM 2000 E1372749 N4990742 at all times in when the Consent Holder is exercising this consent to abstract water under Condition 3(b).
9. a) ~~Prior to exercising the consent~~ By 30 June 2023, the Consent Holder must submit a residual flow measurement design to the Consent Authority;  
b) The design certified by the Consent Authority must be installed immediately below the point of take ~~prior to the first exercise of this consent~~ by 1 October 2023 to ensure the residual flow specified in Conditions 57 and 8 can be maintained; and  
~~b)–~~  
c) The measurement must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.
10. No abstraction, other than for reasonable domestic and stock drinking water purposes, must occur when flows in the Taieri River are less than the minimum flow of 1000 litres per second at the Taieri River at Waipiata flow monitoring site MS5. When the minimum flow is reached, water must not be used for other uses such as domestic irrigation, car washing or filling spas or swimming pools.
11. ~~Within 5 years of this consent being exercised, at least 100 hectares of area on the Mulholland property (Sec 1 SO Plan 23520, Section 1 SO Plan 23521, Lot 1 DP 427338) must be spray irrigated.~~
12. ~~Prior to exercising the consent, the Consent Holder must install a fish screen across the instream intake to avoid fish ingress and uptake that complies with the following:~~
  - ~~a) The maximum water velocity into the entry point of the intake structure is no greater than 0.12 metres per second;~~
  - ~~b) The apertures on the intake screen are no greater than 3 millimetres side of square or no greater than 2 millimetres bar or slot width~~
  - ~~c) Sweeping velocity is equal or greater than approach velocity;~~~~The fish screen must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down~~



## Performance Monitoring

~~1311~~

- a) The Consent Holder must maintain for both takes a:
  - iv. Water meter(s) that which will measure the rate and the volume of water taken to within an accuracy of +/- 10% at NZTM E1372900 N4987395. The water meter must be capable of output to a datalogger.
  - v. a datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken.
  - vi. a telemetry unit which sends all of the data to the Consent Authority.
- b) The Consent Holder must provide telemetry data once daily to the Consent Authority. The Consent Holder must ensure data compatibility with the Consent Authority's time-series database and conform with Consent Authority's data standards.
- c) Within 20 working days of the installation of the telemetry unit, any subsequent replacement of the telemetry unit and at five yearly intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
  - vii. Each device is installed in accordance with the manufacturer's specifications;
  - viii. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and
  - ix. that the water meter has been verified as accurate.
- d) The telemetry unit must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
- e) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.
- f) The Consent Holder must report any malfunction of the telemetry unit to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired within 10 working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including photographic evidence, to the Consent Authority within 5 working days of the completion of repairs.

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.

The water meter, data logger and telemetry unit should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.

~~124.~~ The authorised design to measure the residual flow required by Conditions ~~9-7~~ and ~~6-8~~ must be maintained in good working order to ensure the weir is performing as designed. Records must be kept of all inspections and maintenance and these should be available to the Consent Authority on request.

~~15. The fish screen as required by Condition 12 must be maintained in good working order, to ensure the fish screen is performing as designed. Records must be kept~~



~~of all inspections and maintenance and these should be available to the Consent Authority on request.~~

136. ~~i) A water use efficiency report must be provided to the Consent Authority every 5 years, starting 2026, by 31 July each year for the period commencing 1 July the previous year and ending 30 June the current year.~~ The report must assess the water use over the previous ~~4260~~ months in respect of the efficient use of water for the purpose(s) consented. This report must include, but not be limited to:
- a) ~~Area, and~~ crop type irrigated including a scaled map, aerial photo (or Google Earth image) of the irrigated areas, ~~number of harvests per year, and timing;~~
  - b) Annual summary of the monthly volume of water abstracted from Unnamed tributary of Pig Burn;
  - c) Reasons why use may have varied from the previous ~~five year period;~~
  - 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 year;
  - e) Any changes or modifications to irrigation (and water conveyance) infrastructure;
  - f) A description of water use efficiency or conveyance upgrades that have taken place since the commencement of this consent including any:
    - (i) Upgrades to existing open races which may including piping;
    - (ii) Establishment of any water storage infrastructure;
  - g) A description of water use efficiency or conveyance upgrades that are planned within the next ~~53~~ years and the timeframes proposed for their implementation; and
  - h) Water conservation steps taken.

~~ii) The water efficiency report in (i) may be replaced by a Certified Freshwater Farm Plan that has been prepared in accordance with Part 9A of the Resource Management Act 1991, once these are required under the legislation.~~

#### General

164. The Consent Holder must ensure that at all times:

- a) There is no leakage from pipes and structures;
- b) The use of water is confined to targeted areas, Appendix 1 and
- c) That the volume of water used for irrigation does not exceed that required for the soil to reach field capacity and avoids the use of water onto non-productive land such as impermeable surfaces; and
- d) That irrigation to land must not occur when the moisture content of the soils is at or above field capacity.

Note: Field Capacity is the amount of water that is able to be held in the soil after excess water has run off.

#### Review



165. 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 during the period of three months either side of the date of granting of this consent each year, 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 regional 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. groundwater or surface water quality;
  - vi. efficiency of water use;
  - vii. Instream biota, including fish passage and the functioning of aquatic ecosystems; or new requirements for measuring, recording and transmission;



### **Notes to Consent Holder**

1. *Under section 125 of the Resource Management Act 1991, this consent lapses 5 years after the date of commencement of the consent unless:
  - a) *The consent is given effect to; or*
  - b) *The Consent Authority extends the period after which the consent lapses.**
2. *Section 126 of the Resource Management Act 1991 provides that the Consent Authority may cancel this consent by written notice served on the Consent Holder if the consent has been exercised in the past but has not been exercised during the preceding five years.*
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).*

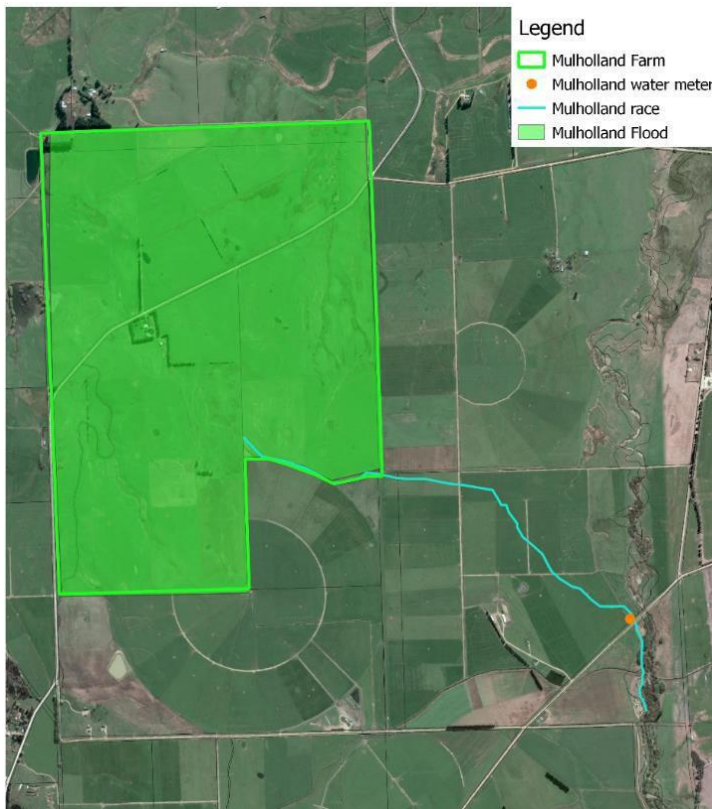
*Primary allocation may be lost if an application is not made at least 6 months prior to expiry and will be lost if an application is not made at least 3 months prior to expiry. A late application will likely result in the application being treated as supplementary allocation, if any such allocation is available.*
4. *Where information is required to be provided to the Consent Authority in condition/s 13, 14, 15 and 16 this is provided in writing to [watermetering@orc.govt.nz](mailto:watermetering@orc.govt.nz), and the email heading is to reference RM20.039.06 and the condition/s the information relates to.*
5. *It is the responsibility of the consent holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the New Zealand Drinking Water Standards.*
6. *Water may be taken at any time for reasonable domestic or stock water purposes where and the taking or use does not, or is not likely to, have an adverse effect on the environment in accordance with Section 14 of the Resource Management Act 1991.*
7. *The Consent Holder is responsible for accessing all relevant water flow information including the flow phone or the Consent Authority's website information to comply with the minimum flow(s) set out in Condition 10.*
8. *This permit is subject to Water Metering Exemption WEX0168 and WEX0049.*



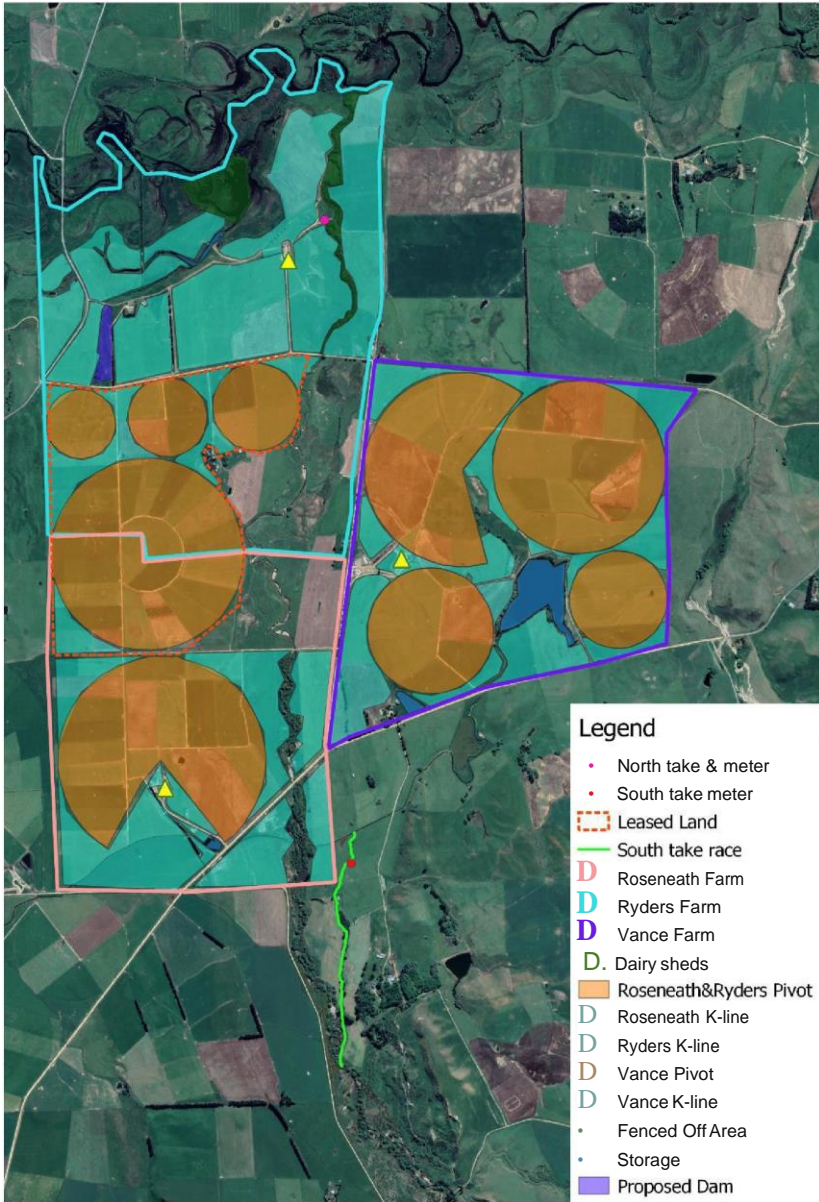
Issued at Dunedin this day of

Joanna Gilroy  
**Manager Consents**

### Appendix 1: Irrigation area









**Appendix 2: Irrigation take year**

<b>Year</b>	<b>Consent Holder taking</b>
2021	Concept/Sophie Trust
2022	Mullholland
2023	Hamilton
2024	
2025	
2026	
2027	
2028	
2029	
2030	
2031	
2032	
2033	
2034	
2035	



Our Reference: A1515767

Consent No. RM20.039.07

### **WATER PERMIT**

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

Name: Concept Farms Limited

Address: CEG Limited, 123 Vogel Street, Dunedin

To take and use surface water as primary allocation from the Pig Burn for the purpose of irrigation, dairy shed use and stock drinking water

For a term expiring 1 January 31 December 2034

Location of Point of Abstraction: On the left bank of the Pig Burn, approximately 700 metres upstream of the confluence of the Pig Burn and the Taieri River, Waipiata, Maniototo

Legal Description of land at point of abstraction: Sec 35 Blk XIV Maniototo Survey District

Legal Description of land (s) where water is to be used: Sec 19, Sec 31 and Pt Sec 32 Blk XIV Maniototo SD and Sec 2 SO 24830, Sec 11 and Sec 12 Blk XIV Maniototo SD, Secs 33 – 35 Blk XIV Maniototo SD, Sec 23 Blk XIV Maniototo SD, Pt Lot 3 DP 340765

Map Reference at point of abstraction (NZTM 2000): E1372749 N4990742

### **Conditions**

#### **Specific**

1. This consent must not commence until Consent 96254 has been surrendered or has expired.
2. The take and use of surface water as primary allocation from Pig Burn at the map reference specified above and the land legally described above for irrigation, dairy shed use and stock water must be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Consent Authority as consent number RM20.039.07.
  - a) Application form, and assessment of environmental effects dated 12 February 2020;
  - b) Further information was requested on 24 February 2020 and a response was received on 3 April 2020; and
  - c) Amended application 11 September 2020.

If there are any inconsistencies between the above information and the conditions of this consent, the conditions of this consent will prevail.



3. The rate and quantity of abstraction as primary allocation from the Pig Burn must not exceed:
  - a) 42 litres per second;
  - b) 112,344 cubic metres per month; and
  - c) 1,028,478 cubic metres in each 12 month period, commencing 1 July of any year and ending 30 June of the following year.
  
4. ~~a) The Consent Holder must maintain a residual flow of at least 10 litres per second below the intake on the Pig Burn at NZTM 2000 E1372749 N4990742 at all times in the years 2021–2026 when the Consent Holder is exercising this consent to abstract water.~~  
~~b) In the years 2026–2035 the Consent Holder must maintain a residual flow of at least 20 litres per second below the intake on the Pig Burn at NZTM 2000 E1372749 N4990742 at all times when the Consent Holder is exercising this consent to abstract water.~~
  
5.
  - a) ~~Prior to exercising the consent~~By 30 June 2023, the Consent Holder must submit a residual flow measurement design to the Consent Authority;
  - b) The design certified by the Consent Authority must be installed immediately below the point of take ~~prior to the first exercise of this consent~~by 1 October 2023 to ensure the residual flow specified in Condition ~~5–4~~ can be maintained; and
  - c) The measurement must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.
  
6. No abstraction, other than for reasonable domestic and stock drinking water purposes, must occur when flows in the Taieri River are less than the minimum flow of 1000 litres per second at the Taieri River at Waipiata flow monitoring site MS5. When the minimum flow is reached, water must not be used for other uses such as domestic irrigation, car washing or filling spas or swimming pools.
  
7. ~~Prior to exercising the consent~~By 1 October 2023, the Consent Holder must install a fish screen across the instream intake to avoid fish ingress and uptake that complies with the following:
  - a) The maximum water velocity into the entry point of the intake structure is no greater than 0.12 metres per second;
  - b) The apertures on the intake screen are no greater than 3 millimetres side-of-square or no greater than 2 millimetres bar or slot width
  - c) Sweeping velocity is equal or greater than approach velocity;The fish screen must be fully functional at all times. If it is damaged and cannot be repaired or replaced immediately, the intake must be shut down.

#### Performance Monitoring

8.
  - a) The Consent Holder must maintain a:
    - i. Water meter(s) that which will measure the rate and the volume of water taken to within an accuracy of +/- 10% at NZTM E1372736 N49990803The water meter must be capable of output to a datalogger.
    - ii. a datalogger(s) that time stamps a pulse from the flow meter at least once every 15 minutes and have the capacity to hold at least twelve months data of water taken.
    - iii. a telemetry unit which sends all of the data to the Consent Authority.



- b) The Consent Holder must provide telemetry data once daily to the Consent Authority. The Consent Holder must ensure data compatibility with the Consent Authority's time-series database and conform with Consent Authority's data standards.
- c) Within 20 working days of the installation of the telemetry unit, any subsequent replacement of the telemetry unit and at five yearly intervals thereafter, and at any time when requested by the Council, the Consent Holder must provide written certification to the Consent Authority signed by a suitably qualified person certifying, and demonstrating by means of a clear diagram, that:
  - x. Each device is installed in accordance with the manufacturer's specifications;
  - xi. Data from the recording device can be readily accessed and/or retrieved in accordance with the conditions above; and
  - xii. that the water meter has been verified as accurate.
- d) The telemetry unit must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
- e) All practicable measures must be taken to ensure that the water meter and recording device(s) are fully functional at all times.
- f) The Consent Holder must report any malfunction of the telemetry unit to the Consent Authority within 5 working days of observation of the malfunction. The malfunction must be repaired within 10 working days of observation of the malfunction and the Consent Holder must provide proof of the repair, including photographic evidence, to the Consent Authority within 5 working days of the completion of repairs.

Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.

The water meter, data logger and telemetry unit should be safely accessible by the Consent Authority and its contractors at all times. The Water Measuring Device Verification Form and Calibration Form are available on the Consent Authority's website.

- 9. The authorised design to measure the residual flow required by Conditions 4 ~~and 5~~ must be maintained in good working order to ensure the weir is performing as designed. Records must be kept of all inspections and maintenance and these should be available to the Consent Authority on request.
- 10. The fish screen as required by Condition 7 must be maintained in good working order, to ensure the fish screen is performing as designed. Records must be kept of all inspections and maintenance and these should be available to the Consent Authority on request.
- 11. ~~i) A water use efficiency report must be provided to the Consent Authority every year, starting 2026, by 31 July each year for the period commencing 1 July the previous year and ending 30 June the current year.~~ The report must assess the water use over the previous ~~60~~42 months in respect of the efficient use of water for the purpose(s) consented. This report must include, but not be limited to:
  - a) Area ~~and~~ crop type irrigated including a scaled map, aerial photo (or Google Earth image) of the irrigated areas, ~~number of harvests per year, and timing;~~



- b) Annual summary of the monthly volume of water abstracted from Unnamed tributary of Pig Burn;
- 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 year;
- e) Any changes or modifications to irrigation (and water conveyance) infrastructure;
- f) A description of water use efficiency or conveyance upgrades that have taken place since the commencement of this consent including any:
  - (i) Upgrades to existing open races which may including piping;
  - (ii) Establishment of any water storage infrastructure;
- g) A description of water use efficiency or conveyance upgrades that are planned within the next 3 years and the timeframes proposed for their implementation; and
- h) Water conservation steps taken.

ii) The water efficiency report in (i) may be replaced by a Certified Freshwater Farm Plan that has been prepared in accordance with Part 9A of the Resource Management Act 1991, once these are required under the legislation.

#### General

12. The Consent Holder must ensure that at all times:

- a) There is no leakage from pipes and structures;
- b) The use of water is confined to targeted areas, Appendix 1 and
- c) That the volume of water used for irrigation does not exceed that required for the soil to reach field capacity and avoids the use of water onto non-productive land such as impermeable surfaces; and
- d) That irrigation to land must not occur when the moisture content of the soils is at or above field capacity.

Note: Field Capacity is the amount of water that is able to be held in the soil after excess water has run off.

#### Review

13. 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 during the period of three months either side of the date of granting of this consent each year, 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 regional 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. groundwater or surface water quality;
  - VI. efficiency of water use;
  - VII. Instream biota, including fish passage and the functioning of aquatic ecosystems; or new requirements for measuring, recording and transmission;

#### **Notes to Consent Holder**

1. *Under section 125 of the Resource Management Act 1991, this consent lapses 5 years after the date of commencement of the consent unless:*
  - a) *The consent is given effect to; or*
  - b) *The Consent Authority extends the period after which the consent lapses.*
2. *Section 126 of the Resource Management Act 1991 provides that the Consent Authority may cancel this consent by written notice served on the Consent Holder if the consent has been exercised in the past but has not been exercised during the preceding five years.*
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 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. *Where information is required to be provided to the Consent Authority in condition/s 8, 9, 10 and 11 this is provided in writing to [watermetering@orc.govt.nz](mailto:watermetering@orc.govt.nz), and the email heading is to reference RM20.39.07 and the condition/s the information relates to.*
5. *It is the responsibility of the consent holder to ensure that the water abstracted under this resource consent is of suitable quality for its intended use. Where water is to be used for human consumption, the consent holder should have the water tested prior to use and should discuss the water testing and treatment requirements with a representative of the Ministry of Health and should consider the New Zealand Drinking Water Standards.*
6. *Water may be taken at any time for reasonable domestic or stock water purposes where and the taking or use does not, or is not likely to, have an adverse effect on the environment in accordance with Section 14 of the Resource Management Act 1991.*



- The Consent Holder is responsible for accessing all relevant water flow information including the flow phone or the Consent Authority's website information to comply with the minimum flow(s) set out in Condition 6.*

Issued at Dunedin this day of

Joanna Gilroy  
**Manager Consents**



Appendix 1: Irrigated area

