Decision Report

Bendigo Station Limited

RM19.079.01, 02 and 03

Resource Consent Applications to Otago Regional Council

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Appendix 1 Consent Conditions

1 Introduction

- [001] In March 2020 Bendigo Station Limited (Bendigo or applicant) lodged an application with the Otago Regional Council (ORC) to take surface water from Bendigo Creek for the purpose of domestic supply, stock drinking water supply and irrigation. The application sought to replace two existing deemed permits¹ (RM20.079.01) which expire on 1 October 2021 and obtain a new permit (RM20.079.02) for a supplementary allocation. In May 2020 Bendigo lodged² a further application to dam water (RM20.079.03) within a reservoir located outside the bed of a watercourse (referred to as the Bendigo Pond).
- [002] The two existing deemed permits are able to be exercised under s124 of the RMA.
- [003] The applicant initially sought a 25-year consent duration for the replacement of the deemed permits. This was subsequently amended to 15 years.

The applications are granted for the reasons herein.

2 Appointment

[004] The ORC, acting under s34A of the Resource Management Act 1991, appointed independent hearing commissioner Rob van Voorthuysen³ to hear and decide the applications.

3 Process Issues

3.1 Notification, submissions, written approvals, pre-hearing meetings, site visit and hearing

- [005] The application was limited notified in June 2020 and a submission was received from Aukaha on behalf of Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga (Ngā Rūnanga). I discuss the matters raised by Aukaha primarily in section 4.11 of this Decision.
- [006] For completeness I record that a submission was lodged by the Otago Fish and Game Council. However, that submission was withdrawn on 8 October 2020 as a result of the applicant amending the duration sought to 15 years.
- [007] Unconditional written approval was obtained from the Director-General of Conservation on 14 July 2020.
- [008] No formal pre-hearing meetings were held.
- [009] On 4 May 2021 the sole submitter Aukaha advised that they did not require to be heard and they would instead table their evidence and answer any questions in writing, enabling the application to be considered 'on the papers'. On that same day the applicant advised that they would also be happy for the application to be considered 'on the papers'. Accordingly, the hearing was cancelled.
- [010] The ORC Section 42A Report authored by consultant planner Charles Horrell, the applicant's opening legal submissions and evidence,⁴ and submitter evidence⁵ was pre-circulated in conformance with a Minute I issued setting out a filing timetable. I posed several written questions to Mr Horrell on 8 April 2021 and written answers were provided on 4 May 2021. On 14 May 2021 Mr Horrell provided a written 'Statement of Reply' responding to matters raised in the applicant and submitter evidence. This would normally occur prior to the applicant's right of reply in a hearing, thereby enabling the applicant to

¹ Deemed Permits WR1233CR and WR3908CR.

² At the request of the ORC.

³ Commissioner van Voorthuysen is an experienced independent commissioner, having sat on over 320 hearings throughout New Zealand since 1998. He has qualifications in natural resources engineering and public policy. In 2020 he was appointed as a Freshwater Commissioner by the Minister for the Environment under Clause 65 of Schedule 1 to the RMA.

⁴ Counsel Simon Pierce; Grant Porter (Bendigo Station General Manager); Dr Richard Allibone (consultant ecologist); Christina Bright (consultant hydrologist); William Nicolson (consultant planner) who lodged primary and supplementary evidence

⁵ Tim Vial, Senior Planner at Aukaha.

- comment on any revised recommendations. On that basis I provided the applicant with an opportunity to provide concluding comments and these were lodged on 17 May 2021.6
- [011] In response to a concern raised by Aukaha, I provided their planning witness (Tim Vial) an opportunity to provide 'rebuttal evidence' relating to the supplementary evidence of Will Nicolson (Bendigo's planning consultant). Mr Vial submitted his rebuttal evidence⁷ on 19 May 2021. Thereafter I provided both Mr Horrell and the applicant to comment on that rebuttal evidence. For the applicant Mr Nicolson did not wish to comment further. Mr Horrell provided further comments on 21 May 2021 which I received from ORC on 24 May 2021.
- [012] Copies of the legal submissions and statements of evidence are held by ORC. I do not separately summarise the matters covered here, but I refer to or quote from that material as appropriate in the remainder of this Decision.
- [013] I record that I had no questions arising from the applicant's evidence, but note that some of the applicant's witnesses helpfully addressed matters that I raised in my written questions to Mr Horrell. I similarly had no questions arising from the tabled primary and rebuttal evidence provided by Mr Vial on behalf of Aukaha.
- [014] The application documentation and Section 42A Report included numerous photographs of the points of take from both watercourses. I am also familiar with the general area and the nature of its watercourses as a result of previous deemed permit hearings and site visits in the surrounding area. On that basis I did not undertake a site visit.

3.2 Section 92 requests

[015] ORC requested further information on 19 March 2020 regarding effects on Regionally Significant Wetlands; water conveyance and storage means; efficiency of water use; assessments against specific planning provisions and actual and potential effects on aquatic ecosystems. The requested information was provided in April and May 2020.

3.3 Officer's recommendations

[016] Mr Horrell recommended that the applications be granted. I discuss his more detailed recommendations in subsequent parts of this Decision.

3.4 Description of the Activity

- [017] The details of the applicant's intakes, pipeline, storage pond and irrigated areas are fully described in the resource consent application⁸ (RCA) and the Section 42A Report⁹ and there is no need for me to repeat that level of detail here. Readers of this Decision should also read the RCA or Section 42A Report for a full description of the applicant's proposal. However, some of the more salient points are:
 - Bendigo Creek is located ≈ 11km south west of Tarras, its headwaters are located in the Dunstan Mountains and it flows into the Clutha River/Mata Au just upstream of Lake Dunstan;
 - Deemed Permits WR1233CR and WR3908CR jointly authorise 83.3 L/s of abstraction. The permits relate to the same take point on Bendigo Creek and so the applicant wishes to replace them with a single consent;
 - The water is abstracted by way of a screened open pipe and conveyed ≈2 km to Bendigo Pond through a 300 mm HDPE pipe. Bendigo Pond has a maximum capacity of 53,820 m³ and a depth of

⁶ Email from Will Nicolson to ORC.

⁷ Rebuttal Evidence of Tim Vila on behalf of Kāi Tahu ki Otago, dated 19 May 2021 (Rebuttal Vial).

Resource Consent Application to Otago Regional Council, Prepared for Bendigo Station Limited, Landpro Limited, 27 February 2020. Sections 1.1 and 3.

⁹ Sections 4.2, 4.3 5.1

- 3 m. Another pond called "Cherry Holdings Pond" adjoins Bendigo Pond. Bendigo Pond and Cherry Holdings Pond¹⁰ are linked by a pipe and water can flow from one pond to the other;
- The abstracted water is monitored by a water meter (WM1515) installed in February 2019 that is located ≈750 m downstream of the point of take;
- At the water meter a small offtake pipe conveys water to a stock water holding pond;
- Excess water in Bendigo Pond discharges over a spillway back into Bendigo Creek ≈1.8km downstream of the point of take;
- The water from Bendigo Pond is used to irrigate ≈100ha of pasture in the Shine Basin using a centre pivot and K-line pods. Bendigo intends to increase the area under irrigation by 82.4ha to enable the development of a vineyard using drip irrigation;¹¹
- While there is no long term flow monitoring data for Bendigo Creek, MfE river flow modelling data indicates that in the vicinity of the take it has a naturalised mean annual flow of 243 L/s and a mean annual low flow (MALF) of 63 L/s. However, a catchment correlation ¹² with Lauder Creek commissioned by ORC from a company called Raineffects Limited concluded that at the take point the mean annual flow was 120 L/s and the MALF was ≈ 33 L/s;
- Flow monitoring undertaken by the applicant since February 2020 was used to generate an extended data record for Bendigo Creek that was correlated by the applicant's advisors to Lauder Creek suggesting a mean annual flow of 86 L/s and a MALF of ≈ 20 L/s;¹³
- The appropriateness of the applicant's February 2020 mean annual flow and MALF estimates was disputed by ORC's consultant hydrologist¹⁴ for a number of reasons;¹⁵
- Bendigo Creek typically runs dry ≈2 km downstream of the point of take and rarely reaches the Clutha River/Mata Au. The Creek's lower section is overgrown and only flows during major floods. Even under relatively wet conditions, flows seldom continue past Bendigo Loop Road¹⁶ and Bendigo Creek is dry 4.5 km upstream from its confluence with the Clutha/Mata-Au:¹⁷
- There are no records of fish in Bendigo Creek held in the New Zealand Freshwater Fish Database. A December 2019 fish survey identified five brown trout.¹⁸ These are considered to be 'stunted' with no sports fishing value. There are likely downstream barriers to fish migration including steep reaches and waterfalls; and
- The applicant did not initially propose a residual flow.
- [018] Bendigo Creek is not listed in Schedules 1A, 1B, 1C, 1D¹⁹ or 2 of the RPW:O. Bendigo Wetland is a Regionally Significant Wetland located approximately 8 km west and downstream of the point of the take. It is approximately 240 hectares in area and is located at the head of Lake Dustan.
- [019] The layout of the points of take and the water distribution system is shown below (taken from Figure 1 of the Section 42A Report).

¹⁰ Cherry Holdings Pond has a maximum capacity of 18,332 m³ and a depth of 3 m.

¹¹ The applicant is also converting 202ha pf pasture to cherries which will be irrigated from a pond called the "Cherry Holdings Pond". That pond adjoins the Bendigo pond but it is fed a bore (G41/0435) located close to the Clutha River and abstraction from that bore is authorised by consent RM17.194.01.

¹² Review of Bendigo Creek Hydrology, prepared by David Stewart, Raineffects, February 2021. Appendix 4 D to the S42A Report.

¹³ EIC Bright, Table 1 and paragraph 3.12.

¹⁴ D Stewart at Raineffects Limited. Appended to Mr Horrell's Right of Reply Report.

¹⁵ Horrell Right of Reply Report, paragraph 19. The reasons included a poor coefficient of corelation, the nature of the gauged flows and the resulting gauging site rating curve, and the short period of record.

¹⁶ Raineffects Report, pages 2 and 5.

¹⁷ EIC Bright, paragraph 3.18.

¹⁸ Three sites were electric fished upstream of the intake and two sites downstream. The only fish encountered were found at the lowermost site

¹⁹ Schedule 1D of the RPW identifies the spiritual and cultural beliefs, values and uses associated with water bodies of significance to Kai Tahu.



Figure 1: Scheme Layout

[020] Bendigo has sought the following rates of abstraction:

- 50 L/s as primary allocation;
- 110 L/s as supplementary allocation; and
- A combined abstraction rate of 160 L/s;
- [021] The volumes of abstraction now sought are set out in Table 1 below. I have separated the irrigation requirements for the existing 100 ha of pasture and the proposed 82.4 ha of vineyard. ²⁰

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Catagoni	Monthly	Annual
Category	(m3/month)	(m3/year)
Pasture irrigation	171,000	820,000
Vineyard irrigation	61,800	196,936
Stock drinking	3,118	37,413
Domestic	30	365
Pond maintenance	-	25,854
Total	235,948	1,080,568

Table 1: Volumes sought

3.5 Consent categories

- [022] The replacement of the two deemed permits with 50 L/s of primary allocation is categorised as a restricted discretionary activity under Rule 12.1.4.5 of the RPW:O. Matters of discretion are set out in Rule 12.1.4.8 of the RPW:O.
- [023] The proposed taking of 110 L/s as supplementary allocation is a restricted discretionary activity under Rule 12.1.4.7 of the RPW:O. Rule 12.1.4.7(iii) specifies that a minimum flow of not less than either 50% of the natural flow or the natural mean flow at the point of take is to apply. Matters of discretion are also set out in Rule 12.1.4.8 of the RPW:O.

²⁰ The monthly and annual volumes are greater than those originally set out in the RCA. The applicant provided a Memorandum to ORC in May 2020 advising of an arithmetic error in the RCA regarding the addition of irrigation volumes required.

- [024] The damming of water in Bendigo Pond is a discretionary activity under Rule 12.3.4.1(1) of the RPW:O.²¹ The abstraction of water from Bendigo Pond is a discretionary activity under Rule 12.1.5.1 of the RPW:O.²²
- [025] Maintenance of the applicant's intake infrastructure is a permitted activity under RPW:O Rule 13.5.1.1 and its ongoing use is permitted by RPW:O Rule 13.1.1. The discharge to from Bendigo Pond to Bendigo Creek is a permitted activity under RPW:O Rule 12.C.1.1.
- [026] The takes from Bendigo Creek, the storage of that water in Bendigo Pond and the subsequent abstraction of water from Bendigo Pond are all inseparable activities and so applying the bundling principle the applications are collectively categorised as a <u>discretionary activity</u>. This was confirmed by Mr Horrell²³ and endorsed by Mr Nicolson.²⁴
- [027] When forming an opinion for the purposes of subsection 104(1)(a) of the RMA I may disregard an adverse effect of the activity on the environment if a national environmental standard or a plan permits an activity with that effect.²⁵ I note that Rule 12.1.2.5 of the RPW:O permits the taking up to 25,000 litres per day at a rate of 1 L/s. I have not disregarded the specific effect of taking that amount of water from Bendigo Creek for the simple fact that it would be indistinguishable from the effects related to the remainder of the abstraction.
- [028] Under the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 any future modifications to the intake structure may require consent under the NES-F as a discretionary activity if not covered by regulations 70 and 71.26 If that is the case then I am satisfied any such consents can be applied for at a later date prior to any intake modification works being undertaken. It is not necessary to delay consideration of the replacement of the Deemed Permits in the meantime. I note that Mr Horrell advised that no consents are currently required under the NES-F²⁷ and Mr Nicolson agreed.²⁸
- [029] In March 2020 ORC notified PPC7 to the RPW:O and, having called it in, the EPA re-notified it in July 2020. Under PPC7 the application is a non-complying activity under Rule 10A.3.2.1 However, under s88A(1A) of the RMA the consent categories outlined above continue to apply. On that basis I do not consider that a s104D analysis is required. However, if I am wrong about that I record that (as I will discuss later) the adverse effects of the activity on the environment are minor and so the application passes through the s104D(1)(a) 'gateway' and it can be assessed under s104 of the RMA.
- [030] The objectives and policies of PPC7 are however a relevant s104 matter and I discuss that later in this Decision.

4 Section 104 and 104B matters

- [031] I now address relevant aspects of the application in terms of s104 and 104B of the RMA.
- [032] I note that granting the application will result in positive social and economic effects. These were summarised in the RCA,²⁹ the evidence of Grant Porter and the Section 42A Report.³⁰ Unsurprisingly they relate to the ongoing operation of a large, productive beef and merino farm that contributes to both the local and regional economy. Without the use of additional water, Bendigo's farming operations would

²¹ The damming of water in the Cherry Holdings Pond is a permitted activity under Rule 12.3.2.1.

²² Abstraction of water from the Cherry Holdings Pond is a permitted activity under Rule 12.1.2.3.

²³ Section 42A Report, section 5.1.

²⁴ EIC Nicolson, paragraph 35.

²⁵ Section 104(2) of the RMA.

²⁶ Permitted activity rules for culverts and weirs.

²⁷ Section 42A Report, section 6, page 23.

²⁸ EIC Nicolson, paragraph 39.

²⁹ Section 6.11.

³⁰ Section 42A Report, section 7.8.

- not be economic and could not support its 17,000 stock units, three families and six staff.³¹ I accept that the value of recent investment by Bendigo in the current irrigation infrastructure is substantial.³²
- [033] Regarding cumulative effects, Mr Horrell advised that based on the hydrology of Bendigo Creek, its disconnection with the downstream catchment, and the fact that the proposed take is the only surface water abstraction within the Bendigo Creek catchment, cumulative effects were no more than minor. ³³ I agree.

4.1 Appropriateness of volumes sought

4.1.1 Irrigation

- [034] RPW:O Policy 6.4.0A is to ensure that the quantity of water granted is no more than that required for the purpose of use.
- [035] Appendix E to the RCA contained irrigation demand figures from a report previously commissioned by ORC from Aqualinc to determine reasonable monthly and seasonal irrigation water requirements.³⁴ The table in Appendix E contained an error insofar as the incorrect total values were presented. This was pointed out in a memorandum from Landpro. ³⁵
- [036] Mr Horrell advised that for Otago a one in ten year drought or 90th percentile annual demand is the most appropriate when considering efficient water use.³⁶ The applicant sought annual volumes of irrigation water based on the 90th percentile annual demand.³⁷ I agree with that approach, noting that to be consistent with other recent deemed permit replacement applications that I have acted on as a decision-maker.
- [037] The monthly volume should be based on the estimated peak monthly demand for any one month, noting that only occurs for one to two months in an irrigation season.
- [038] I find that the irrigation volumes set out in Table 1 of this Decision are appropriate.

4.1.2 Stock Drinking

- [039] Bendigo sought the following stock water allocation based on 11,500 sheep at 5 L/head/day and 1000 beef cattle at 45 L/head/day:
 - 3,118 m³/month
 - 37,413 m³/year
- [040] Mr Horrell noted that the above figures were derived from the ANZECC guidelines and were consistent with what ORC would consider reasonable drinking water for stock.³⁸ I find that the allocation sought is appropriate.

4.1.3 Domestic supply

[041] Based on one house with four residents at 250 L/day Bendigo sought the following domestic use allocation:

³¹ EIC Porter, paragraph 2.6.

³² A s104(2A) matter encompassing in this case water take, metering, conveyance, water storage and irrigation infrastructure costing the applicant at least \$857,000 to date. EIC Porter, paragraphs 4.3 and 4.5.

³³ Section 42A report, section 7.8.

³⁴ Aqualinc, Guidelines for Reasonable Irrigation Water Requirements in the Otago Region, Prepared for Otago Regional Council, C15000, 2017/07/24

³⁵ Project Memorandum, Landpro Reference:S15298, 22 May 2020.

³⁶ Section 42A Report, section 7.2.2.1.

³⁷ Project Memorandum, Landpro Reference:S15298, 22 May 2020.

³⁸ Section 42A Report, section 7.7.2.2.

- 30 m³/month
- 365 m³/year
- [042] Mr Horrell noted that the volume sought was consistent with the AS/NZS 1547:2012 standards for calculating wastewater volumes for small-scale on-site wastewater systems. He considered that be a reasonable means of assessing an appropriate domestic supply allocation.³⁹ I agree.

4.1.4 Pond maintenance

- [043] Bendigo sought an additional 25,854 m³ of water per year for 'pond maintenance' comprising the loss of water through the base of the reservoir and through evaporation from the pond surface. Mr Horrell considered that it was not reasonable to provide additional water for seepage losses when the alternative was to line the pond. Regarding evaporation from the pond surface, he noted that would likely be offset by rainfall received in the localised catchment.⁴⁰
- [044] I agree and find that no allocation of water should be made for pond maintenance purposes.

4.1.5 Overall volumes

[045] In Table 1 above I set out the monthly and annual volumes sought by the applicant. Based on my assessments Table 2 below sets out the volumes that I find can potentially be provided for within the allocation framework of the RPW:O.

Catagoni	Monthly	Annual
Category	(m3/month)	(m3/year)
Pasture irrigation	171,000	820,000
Vineyard irrigation	61,800	196,936
Stock drinking	3,118	37,413
Domestic	30	365
Total	235,948	1,054,714

Table 2: Potential volumes that can be granted

4.2 Available allocations

[046] Have decided the rates and volumes of abstraction for the various end uses that can potentially be granted consent, I now consider the allowable allocations under the framework of the RPW:O.

4.2.1 Primary allocation

- [047] The RPW:O establishes a primary allocation limit (a maximum instantaneous rate of take) by way of Policy 6.4.2. The allocation is the <u>greater</u> of:
 - under Policy 6.4.2(a), because the watercourses are not listed in RPW:O Schedule 2A, 50% of the respective 7-day mean annual low flow (MALF); or
 - under Policy 6.4.2(b) the sum of consented maximum instantaneous, or consented 7-day, takes of surface water from the watercourses as at 28 February 1998 plus any connected groundwater takes as at 10 April 2010 less any water that is immediately returned to the source water body.
- [048] As noted above the MALF for Bendigo Creek at the point of take is ≈ 20 to 33 L/s. The primary allocation is therefore initially determined by Policy 6.4.2(b) as the applicant's existing deemed permits authorise 83.4 L/s of abstraction. I note Bendigo holds the only surface water take permits within the Bendigo Creek catchment.

³⁹ Section 42A Report, section 7.7.2.1.

⁴⁰ Section 42A Report, section 7.7.2.3

- [049] RPW:O Policy 6.4.2 is however tempered by RPW:O Policy 6.4.2A which is to grant from within the primary allocation no more water than has been taken under the existing consents in at least the preceding five years (historical use). The applicant states that prior to 2019 they were only utilising their Bendigo Creek takes for stock drinking purposes and limited irrigation due to outdated infrastructure. However, in 2019 the conveyance and storage system were upgraded and a water meter was installed. Since April 2019 the rate of take has fluctuated between 40 and 50 L/s.⁴¹ On that basis I have assumed that the primary allocation is dictated by RPW:O Policy 6.4.2A and that it is 50 L/s.
- [050] Policy 6.4.2A also affects the volume of water that can be taken as primary allocation. The ORC has undertaken an analysis of the applicant's historical water use⁴² using data obtained from the water meter installed in February 2019. For the applicant Christina Bright also reviewed the historical use data.⁴³ Table 3 below compares the ORC's and the applicant's assessment of historical use with what is now sought by Bendigo by way of primary allocation.⁴⁴

	Maximum monthly volume (m³/month)	Maximum annual volume (m³/year)
Historical use ORC	132,000	1,046,200
Historical use Bright	132,470	1,048,170
Now sought	132,000	857,778

Table 3: Historical use

[051] The primary allocation volumes now sought by Bendigo are therefore able to be granted under RPW:O Policy 6.4.2A. I note that the annual volume of 857,778 m³/year is equivalent to the sum of the pasture irrigation, stock drinking and domestic supply volumes set out in Table 2 of this Decision.

4.1.2 Supplementary allocation

- [052] As noted earlier in this Decision, Bendigo has also sought 110 L/s of supplementary allocation to fill the Bendigo Pond during times of high flow in Bendigo Creek. This is intended to be taken concurrently with the 50 L/s primary allocation resulting in a combined maximum rate of take of 160 L/s.
- [053] Policy 6.4.9(a) of the RPW:O relates to supplementary allocations and I consider it is confusingly worded and is open to varying interpretation, as evidenced by the different opinions on how it works voiced by Mr Horrell, Mr Nicolson and Mr Vial. Policy 6.4.9(a) provides for supplementary takes subject to a minimum flow being imposed to ensure that no less than 50% of the natural flow remains instream. To implement that approach a flow monitoring station would logically be required upstream of the take, which is not the case here.
- [054] I understand that the RPW:O's intended policy approach is clarified by Method 15.8.1A.1 of the RPW:O. Under that method and assuming a Bendigo Creek MALF of ≈ 20 to 33 L/s at the point of take a first supplementary allocation block of 100 L/s is available. A second supplementary allocation block of 100 L/s is also available. Consequently, the 110 L/s supplementary allocation rate of take sought by Bendigo can be granted.
- [055] The RPW:O does not appear to explicitly establish volume restrictions for supplementary takes. However, having regard to the primary allocation volumes now sought (Table 3 of this Decision) and the overall or total volumes that I have determined can potentially be provided for (Table 2 of this Decision) I find that a supplementary take volume limit should be imposed that makes up the difference between the Table 2 and Table 3 volumes.

⁴¹ RCA, section 2.3.

⁴² An analysis undertaken by ORC Systems and Information Analyst; Sarah McCrorie, dated 6 October 2020.

⁴³ EIC Bright, Table 3.

⁴⁴ EIC Nicolson, Table 1.

- [056] As the supplementary take will only occur at times of high flow in Bendigo Creek, I see little point in imposing a monthly abstraction limit and consider an annual limit will suffice. If Bendigo is able to take all of its supplementary allocation in one month because that month has sustained high Creek flows then I see no environmental detriment in enabling that to occur.
- [057] Consequently, I find that a supplementary annual volume limit of 196,936 m³/year is appropriate (being 1,054,714 m³/year total from Table 2 minus the 857,778 m³/year primary allocation).
- [058] I note that Mr Horrell's recommended conditions require details of the water used for irrigation to be supplied to ORC as part of a "water use efficiency report". I find that to be appropriate.

4.3 Residual flows

- [059] RPW:O Policy 6.4.7 states "The need to maintain a residual flow at the point of take will be considered with respect to any take of water, in order to provide for the aquatic ecosystem and natural character of the source water body." In general terms, imposing a residual flow is important to ensure that streams are not dewatered (or run dry) as a result of abstractions. Interestingly RWP:O Policy 5.4.8 requires me to have regard to the natural flow characteristics of the waterbodies, subject to the extent to which use and development has influenced those characteristics.
- [060] As noted earlier, Bendigo Creek has a paucity of fishery values. Dr Allibone (Bendigo's technical advisor) advised that the trout density identified in 2019 at a single site 1.5 km below the point of take was very low, the habitat was of limited value for brown trout and the small size of the majority of the trout caught indicated the Creek supported very few adult fish and the population had no sports fishery value.⁴⁵
- [061] Nevertheless, Dr Allibone recommended a residual flow that maintained a continuous flow through the abstraction site, as is currently provided via leakage through the intake weir. 46 Mr Horrell observed that because the current intake structure was an open pipe elevated above the bed of the Creek a residual flow was able to be maintained past the intake at all times. 47
- I note that the Raineffects Report commissioned by ORC stated that historical imagery, anecdotal evidence and inspection of the Creek channel from the bottom of the short gorge to the Clutha/Mata-au confluence showed that under relatively wet conditions, flows in Bendigo Creek seldom continued past Bendigo Loop Road and flows entering the Clutha/Mata-au almost never occurred. The Raineffects Report author concluded that imposing any minimum or residual flow on Bendigo Creek at the abstraction site would achieve nothing for the hydrology downstream.⁴⁸ Adding weight to that view, Ms Bright determined that a flow of ≈ 300 L/s past the point of take would be required to ensure that Bendigo Creek reached the Clutha/Mata-au.⁴⁹
- [063] Mr Horrell recommend that a continuous connected residual flow be maintained at all times immediately downstream of the point of take for a distance of no less than 750 m.⁵⁰ In making that recommendation he considered that the adverse effects of the Bendigo abstraction on the natural character and amenity of Bendigo Creek would be no more than minor.⁵¹ Dr Allibone concluded that from an ecological perspective the existing intake arrangement appeared appropriate to provide a residual flow sufficient to maintain freshwater invertebrate community values. He agreed with the conditions recommended by Mr Horrell.⁵²

⁴⁵ EIC Allibone, paragraphs 9 and 11.

⁴⁶ RCA, section 6.3 and Water Ways Consulting memorandum dated 10 January 2020 (Appendix D of the RCA).

⁴⁷ Section 42A Report, section 7.3, page 28.

⁴⁸ Raineffects Report, page 5.

⁴⁹ EIC Bright, paragraph 3.34.

⁵⁰ Section 42A Report, section 7.3, page 29. Recommended Condition 5(b)(i) for RM20.079.01.

⁵¹ Section 42A Report, section 7.4, page 29.

⁵² EIC Allibone, paragraph 32.

- [064] Mr Nicolson advised that data from the Creek flow monitoring site located ≈750 m downstream of the point of take indicated summer flows of at least 5 L/s at that location. Ms Bright considered that equated to around 25% of MALF.⁵³
- [065] On the evidence I am satisfied that the current Bendigo intake arrangement provides an adequate residual flow and, on that basis, there is no need to impose a specific residual flow consent condition.
- [066] I note that Aukaha initially sought a minimum flow (or residual flow) of 90% of MALF, but I understand that they are no longer seeking that relief.

4.4 Minimum flow

- [067] A minimum flow is the flow in a river below which abstractions must cease. In other words, consented abstractions are progressively restricted (reduced) to ensure that they do not cause the minimum flow to be breached. On occasion, due to natural low flow (drought) conditions, minimum flows are breached even in the absence of abstractions.
- [068] The RPW:O does not set a minimum flow for primary allocation abstractions from Bendigo Creek. The effect of RPW:O Policies 6.4.4. and 6.4.5(d) is that a minimum flow for the primary allocation would need to be established by way of a plan change that added Bendigo Creek to RPW:O Schedule 2A. I understand that until that occurs a minimum flow is not able to be imposed for the primary allocation.
- [069] The situation is different for supplementary allocations.
- [070] As I noted in section 4.1.2 of this Decision, RPW:O Policy 6.4.9(a) provides for supplementary allocations in blocks. RPW:O Method 15.8.1A.2 then sets out the applicable minimum flow regime. Under that method, for the first supplementary allocation the minimum flow is 150 L/s.⁵⁴ The minimum flow for the second supplementary allocation is 250 L/s.⁵⁵
- [071] Mr Horrell confirmed that Method 15.8.1A.2 yields the above results.⁵⁶ Mr Vial was initially of the same view⁵⁷ and confirmed in his rebuttal evidence that the supplementary minimum flow should be 150 L/s based on Policy 6.4.9 and Method 15.8.1A.1.⁵⁸ Mr Vial was also of the view that the maximum supplementary allocation block available in the Bendigo catchment was 100 L/s and the additional 10 L/s sought by the applicant exceeded the available allocation block. That does not accord with my interpretation of Method 15.8.1A.2 which does not limit the number of available supplementary allocation blocks.
- [072] However, RPW:O Policy 6.4.10 provides for further supplementary allocations without any restriction of the volume taken where a minimum flow equal to the natural mean flow is imposed. In this case the mean annual flow is between 86 L/s and 120 L/s. Mr Nicolson suggested that "... it may be that applying RPW Policy 6.4.10 is more appropriate in this instance." In that regard the explanation to Policy 6.4.10 states that "This allocation is likely to be sought by those storing water" which is the case here.
- [073] In his supplementary evidence Mr Nicolson suggested that the explanation to Policy 6.4.9 indicated that the setting of allocation blocks should only apply to multiple applications for supplementary takes which was not the case here. Mr Nicolson considered that instead of setting fixed minimum flows, a minimum flow formula could be used which would require simultaneously measuring the flow at the Creek's flow monitoring site downstream of the take (at or about E1314218 N5108598) and measuring the abstraction

⁵³ EIC Nicolson, paragraph 19.

⁵⁴ Primary allocation of 50 L/s plus first supplementary allocation block of 100 L/s.

⁵⁵ Primary allocation of 50 L/s plus first supplementary allocation block of 100 L/s plus second supplementary allocation block of 100 L/s.

⁵⁶ Minute 2 Response for RM20.079 Bendigo Station Limited, Charles Horrell, 10 May 2021, first page.

⁵⁷ EIC Vial. paragraph 74.

⁵⁸ Rebuttal Vial, paragraph 16.

⁵⁹ EIC Nicolson, paragraph 80(ii).

at Bendigo's water meter (WM1515) and entering those flows into an equation to determine the applicable minimum flow.⁶⁰

- [074] I find that to be an overly complicated approach and do not consider that a constantly varying minimum flow is either practicable or enforceable.
- [075] In his 'Right of Reply Report' Mr Horrell raised similar concerns, advising that Mr Nicolson's suggested conditions provided too much uncertainty, could not be effectively enforced, and were not practical from a compliance perspective given the minimum flow would be moving and would have to be identified at any one time. He considered compliance with the condition would necessarily be particularly reactive.⁶¹
- [076] I concur with Mr Horrell and tend to agree with Mr Nicolson's earlier advice regarding Policy 6.4.10. In terms of ensuring ease of compliance (and therefore also enforceability) I consider that a simple minimum flow regime is desirable.
- [077] Consequently, having regard to Policies 6.4.9 and 6.4.10 (as I am required to do under RMA s104(1)(b)(vi)), I find that a single minimum flow of 120 L/s is appropriate in this case. I note that to be a conservatively high figure given the range of mean annual flow estimates before me, the concern that ORC's consultant hydrologist had with the applicant's lower mean annual flow and MALF estimates (see section 3.4 of this Decision), and the need to afford priority to the health and well-being of the Creek.
- [078] In his answers to my written questions Mr Horrell came to much the same conclusion⁶² and that was reinforced in his Right of Reply Report.⁶³
- [079] I record that Mr Horrell also suggested as an option alternative conditions (his paragraph 30) that had varying rates of take (in 20 L/s blocks) at varying Bendigo Creek flows and an absolute minimum flow of 70 L/s. In responding to Mr Vial's rebuttal evidence, Mr Horrell maintained that advice. 64 As with Mr Nicolson's proposed formula approach, I find Mr Horrell's varying minimum flow regime to be unnecessarily complicated and therefore uncertain from a compliance perspective. In saying that I note that the applicant accepted the table of variable minimum flows suggested as an option by Mr Horrell. 65 However, I remain unpersuaded that such conditions are appropriate.
- [080] The requirement to maintain the 120 L/s minimum flow below the point of take would normally require a flow monitoring station to be installed on the mainstem of Bendigo Creek closely below the point of take. However, in this case I find that the Creek flow monitoring station located ≈700m downstream at or about NZTM 2000 E1314218 N5018598 installed by Bendigo in February 2020⁶⁶ will suffice. In that regard I note the evidence of Ms Bright that due to the Creek bed morphology, it would not be possible to install a site closer to, or immediately downstream of the point of take. She also noted that the Creek upstream of the Creek's flow monitoring site is expected to be flow neutral (no flow loses are expected to occur) and there are minimal contributions expected from runoff and/or gullies in that reach.⁶⁷

4.5 Rationing at times of low flow

[081] The RPW:O discusses rationing in several places⁶⁸ but does not specify a preferred regime. Policy 6.4.12B states that the ORC may instigate its own water rationing regime. I understand that to mean I may impose a rationing regime if one is found to be appropriate. The applicant did not offer a rationing regime in their RCA for and a rationing regime for the primary allocation would only be useful if a minimum

⁶⁰ Supplementary Evidence Nicolson, paragraphs 10 to 13.

⁶¹ Horrell Right of Reply Report, paragraphs 26 and 27.

⁶² Minute 2 Response for RM20.079 Bendigo Station Limited, Charles Horrell, 10 May 2021, first page.

⁶³ Horrell Right of Reply Report, paragraph 32.

⁶⁴ Statement of Reply to Rebuttal Evidence of Charles Horrell for Otago Regional Council, 21 May 2021, paragraph 15.

⁶⁵ Email from Will Nicolson dated 17 May 2021.

⁶⁶ RCA, section 3.4.2, page 17.

⁶⁷ EIC Bright, paragraphs 3.40 and 3.41.

⁶⁸ Including Policies 6.4.12, 6.4.12A, 6.4.12B, 6.4.12C and 6.4.13 and matter of discretion 12.1.4.8(x).

flow was imposed.⁶⁹ As noted above, in this case a primary allocation minimum flow is unable to be imposed at this point in time.

[082] However, the supplementary take will be subject to a minimum flow requirement, as outlined earlier in section 4.4 of this Decision. Bendigo will need to 'ration' (or manage) their supplementary take to ensure the minimum flow is not breached.

4.6 Fish screens

- [083] Notwithstanding that fact that on the evidence Bendigo Creek does not contain fish at or around the point of abstraction, the existing intake contains a screen. To However, the RCA states that a fish screen is not required. The applicant's s92 response clearly stated that no fish screen is proposed. An assessment by Tonkin and Taylor commissioned by the ORC concluded that, based on the currently available data, there was likely to be a negligible impact on the Bendigo Creek fish community from an unscreened intake. To
- [084] Mr Horrell advised that, based on the absence of fish at the point of take, there was no risk of fish uptake and therefore he did not consider a fish screen was necessary. I note that Aukaha withdrew their request for a fish screen. It is a fish screen.
- [085] I find that it is not necessary to impose a consent condition requiring a fish screen.

4.7 Conveyance system

- [086] Bendigo commendably utilises a piped conveyance system which avoids loss of water through seepage and evaporation. The pipeline upgrade cost \$230,000 and the installation of meters cost a further \$44,000.75 Mr Horrell considered that the water transport, storage and application system was efficient.76 I agree.
- [087] The Bendigo Pond RCA states that pond is not clay lined, but has a naturally occurring clay substrate.77

4.8 Bendigo Wetland

- [088] The applicant considers that the effects of the proposed takes on the Bendigo Wetland will be negligible due to the separation distance between the point of take and the wetland and the insignificant effect that the take would have on hydrology of the wetland. Mr Horrell agreed with that assessment, advising that he considered effects on the Regionally Significant Wetland to be negligible. He added that, based on his observations at the site visit and the information provided by the applicant, there were no other wetlands in close proximity to the site (including natural inland wetlands).
- [089] There is no evidence before me that contradicts those assessments and so I find that potential impacts on Bendigo Wetland and other natural wetlands are negligible.

4.9 Effects on groundwater users

[090] There are several existing groundwater takes in or close to the Bendigo Creek catchment on the terrace where the Bendigo Creek bed joins the Clutha River/ Matu-au.

⁶⁹ Rationing generally occurs as the flow in a waterbody approaches the minimum flow.

⁷⁰ RCA, section 2.1.

⁷¹ RCA, section 6.2.

⁷² Tonkin and Taylor, Bendigo Station Limited Consent review, 2 November 2020, page 2.

⁷³ Section 42A Report, section 7.3.

⁷⁴ EIC Vial, paragraph 22(d).

⁷⁵ EIC Porter, paragraph 4.3.

⁷⁶ Section 42A Report, section 7.7.3.

⁷⁷ Section 2. Bendigo Pond details.

- [091] The RCA stated that there are no designated aquifers within the study area, with the closest aquifer being the Lindis Alluvial Ribbon Aquifer approximately 4.7 km to the north of the take point. No adverse effects were anticipated for that aquifer. The RCA also stated that the closest neighbouring groundwater take to the applicant's Bendigo Creek take point was thought to be RM20.016.01 (Peregrine Estate Limited), approximately 3.7 km to the northwest. Due to the considerable distance from the Bendigo take point, it was considered that there would be no adverse effects on neighbouring groundwater users.⁷⁸
- [092] The ORC's technical advisors (Raineffects) concluded 79 that the groundwater takes are likely to be abstracting Clutha River water from either the Clutha and Lindis Rivers, Lake Dunstan, or both due to their proximity to those waterbodies and the significant volumes of water abstracted. Accordingly, the impact of the Bendigo abstraction on the groundwater abstractors located on the terrace was likely to be negligible.
- [093] Mr Horrell advised that while there were a number of groundwater abstractions located in the lower reaches of the Bendigo Creek catchment, due to the Creek's hydrological characteristics and the proximity of the groundwater takes to other more significant water bodies, potential adverse effects on other users would be less than minor. I agree.

4.10 Dam safety

- [094] Bendigo Pond is an existing structure with a maximum capacity of 53,820 m³ and a depth of 3 m. Mr Horrell was concerned about dam safety and advised that the dam had been assessed as having a Low Potential Impact under the NZSOLD 2015 Large Dam Guidelines. He recommended a 5-yearly review of the dam's potential impact classification by a suitably qualified individual. However, he also noted the Building Act 2004 was the primary legislation regulating the construction and management of dams. I therefore enquired as to why this matter was being managed under a water take consent.
- [095] Mr Horrell responded that in the absence of dam safety regulations under the Building Act, dam safety conditions as they relate to environmental effects may be applied to resource consents. He advised that applying dam safety conditions to permits to dam water was standard practice in Otago. He also considered that it was appropriate to apply dam safety conditions to a water permit to dam water and that doing so was *intra vires* as it related to the safe containment of water which would be an aspect of damming.⁸⁰
- [096] I observe from the evidence of Mr Nicolson that the applicant did not appear to oppose the dam safety conditions recommended by Mr Horrell.
- [097] I therefore find that dam safety conditions are appropriate in this case, however those conditions should reflect the fact that the dam in question is an existing structure and there is little by way of public infrastructure or other private property at risk from a potential 'dam break'. As Mr Horrell noted 81 "Currently there is very low risk for these effects [flooding, erosion, land instability, sedimentation, or property damage of any other person's property] to occur to any other persons property due to the Applicant owning surrounding land." I also observe that many of the matters addressed by the recommended conditions are already provided for under s19 of the Building Act (as advised 82 by Mr Horrell) and so do not need to be duplicated here.

4.11 Issues raised by the submitter

- [098] As discussed earlier in this Decision a submission was lodged by Aukaha who opposed the application as lodged, but would support an amended application subject to the following:
 - That the term of consent be no longer than 6 years;

⁷⁸ RCA, section 6.8.

⁷⁹ Raineffects Report, page 7.

⁸⁰ Minute 2 Response for RM20.079 Bendigo Station Limited, Charles Horrell, 10 May 2021, third page.

⁸¹ Minute 2 Response for RM20.079 Bendigo Station Limited, Charles Horrell, 10 May 2021, sixth page.

⁸² Minute 2 Response for RM20.079 Bendigo Station Limited, Charles Horrell, 10 May 2021, fifth page.

- Retain existing requirements for water meter(s) and ensure results continue to be recorded and reported via telemetry;
- Retain existing requirements for fish screen over the intake structure, and
- A minimum flow of 90% of the mean annual low flow (MALF) as calculated by the regional council and an allocation limit of 30% of MALF as calculated by the regional council.
- [099] Aukaha subsequently amended the relief sought by way of the evidence⁸³ of Mr Vial:
 - (a) A consent term for water permit RM20.079.01 (primary allocation) that will expire on 30 December 2035 is accepted, subject to the current intake being retained for the duration of this consent. Kāi Tahu do not support the provision in the conditions that would enable the Applicant to change to a new unspecified intake design.
 - (b) A consent term of six years for water permit RM20.079.02 (supplementary allocation) is accepted.
 - (c) The setting of minimum flows for the supplementary allocation are sought to provide for natural variability of flow and for the health and wellbeing of Bendigo Creek. The moving minimum flow threshold for the supplementary take proposed by Mr Nicolson is not supported by Kāi Tahu.
 - (d) The request for a fish screen over the intake is withdrawn.
 - (e) A consent term for water permit RM20.079.03 (To dam within and from a reservoir outside the bed of a watercourse) that will expire on 30 December 2035 is accepted
- [100] I deal with consent duration in section 6 of this Decision and in drafting that section I have taken into account the amended Aukaha relief regarding duration (points (a), (b) and (e) above).
- [101] The Bendigo takes are currently monitored by a water meter (WM1515) installed in February 2019 that is located ≈750 m from the point of take and the data is already reported to ORC by telemetry. That will continue. I discussed minimum flows in section 4.4 of this Decision and residual flows in section 4.3.
- [102] Aukaha initially requested an allocation limit of 30% of MALF. I understand they are no longer seeking that relief which is commendable as in this case that would amount to ≈ 6 to 10 L/s which is patently inadequate. In any case, the allocable volume is established by the policies of the RPW:O as discussed in section 4.2 of this Decision.
- [103] I note that the evidence of Tim Vial helpfully stated⁸⁴ that "Kāi Tahu acknowledges that the applicant has taken steps to protect the mauri and health of Bendigo Creek by decommissioning an existing open water race, installing a screened intake in Bendigo Creek, and commissioning a flow meter downstream of the point of take. The current intake on the bed of Bendigo Creek ensures that there is a continuity of flow around and below the point of take."

4.12 National environment standards and other regulations

- [104] The Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 apply and Mr Horrell recommended conditions regarding metering and the submission of water take records to ORC to ensure compliance with both the regulations(and the 2020 Amendment Regulations) and Policy 6.4.16 of the RPW:O.
- [105] I addressed the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 in section 3.5 of this Decision.
- [106] No other relevant national environmental standards or regulations were brought to my attention and I am not aware of any.

⁸³ EIC Vial, paragraph 22.

⁸⁴ EIC Vial, paragraph 9.

4.13 National policy statements

- [107] The New Zealand Coastal Policy Statement 2010 (NZCPS) is not relevant.
- [108] Mr Horrell advised that potential effects on renewable electricity generation activities were less than minor and the Bendigo proposal was consistent with the NPS-Renewable Electricity Generation.⁸⁵ I agree.
- [109] The NPS for Freshwater Management 2020 (NPSFM) commenced on 3 September 2020 and so I have had regard to its objective and policies as set out in Part 2 of that document. I note that Part 3 largely relates to implementation actions required by ORC in terms of its regional plan and other executive functions.
- [110] The NPSFM was assessed by Mr Horrell, Mr Nicolson⁸⁶ and Mr Vail.⁸⁷ I have had regard to those assessments.
- [111] The sole Objective 2.1 of the NPSFM 2020 is determinative in this case. It is:
 - (1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:
 - (a) first, the health and well-being of water bodies and freshwater ecosystems
 - (b) second, the health needs of people (such as drinking water)
 - (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future
- [112] In this case the health and well-being of Bendigo Creek is prioritised by adherence to the allocation limits established under the RPW:O. A continuous residual flow will to be maintained downstream of the intake even during low flow periods and a minimum flow requirement applies to the supplementary take. This will assist with maintaining the health and well-being of Bendigo Creek.
- [113] I consider that relevant policies are Policy 1, 3, 7, 9, 10, 11 and 15.88
- [114] Policy 1 is to manage freshwater in a way that gives effect to Te Mana o te Wai. The NPSFM states that Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. This largely replicates Objective 2.1.
- [115] Policy 3 is to manage freshwater in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis. In this case I find that is primarily achieved by ensuring that the allocation for irrigation is limited to the 90-percentile annual (or seasonal) demand, as discussed in section 4.1.1 of this Decision
- [116] Policy 7 is that the loss of river extent and values is avoided to the extent practicable and Policy 9 is that the habitats of indigenous freshwater species are protected. Policy 10 is that the habitat of trout and salmon is protected, insofar as this is consistent with Policy 9. This relates primarily to the imposition of residual flows which I discussed in section 4.3 of this Decision. I note that the evidence is that Bendigo Creek at the point of take does not provide habitat for trout, salmon or indigenous freshwater fish species.
- [117] Policy 11 is that freshwater is allocated and used efficiently and all existing over-allocation is phased out. I understand that the applicant utilises efficient centre pivot and K-line irrigation systems and intends to use efficient drip systems for the proposed vineyard. There is no over allocation (insofar as dictated by

⁸⁵ Section 42A report, section 8.3.4.

⁸⁶ EIC Nicolson, paragraphs 40 to 63.

⁸⁷ EIC Tim Vial, primarily at paragraphs 33 to 48.

⁸⁸ The remaining policies relate to procedural matters; ORC plan making, monitoring and information provision; or features that are not present here (natural inland wetlands and outstanding water bodies).

- the RPW:O) because the rate of take that can be granted is within the primary and supplementary allocations for Bendigo Creek.
- [118] Policy 15 is that communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with the NPSFM. The water abstraction will enable Bendigo to do just that.
- [119] I am satisfied that having regard to the NPSFM does not weigh against a grant of consent.

4.14 Regional Policy Statement

- [120] I understand that as of 15 March 2021 the former Regional Policy Statement for Otago 1998 has been completely revoked and the Partially Operative Otago Regional Policy Statement 2019 now comprises the Regional Policy Statement for Otago.
- [121] I note that in a recent Environment Court decision the Court declined to assess a water take abstraction under the RPS stating "There seems to be little point to the exercise if the Regional Policy Statement does not give effect to the National Policy Statement for Freshwater Management as amended in 2017 or the new National Policy Statement for Freshwater Management released in 2020. We understand that the Regional Council intends on a complete review of this policy document ...".89
- It is tempting to adopt the same approach as the Court, but out of an abundance of caution I briefly turn to the RPS which was also considered by Mr Horrell. In general, and unsurprisingly, the relevant provisions focus on recognising and providing for Kāi Tahu values; maintaining or enhancing the range and extent of habitats provided by fresh water and the natural functioning of rivers; ensuring the efficient allocation and use of water; and encouraging water harvesting and storage so as to reduce demand on water bodies during periods of low flows. I have had regard to all of those matters earlier in this Decision. I note that Mr Horrell considered that the application was generally consistent with the RPS provisions. Mr Nicolson agreed 22 as did Mr Vial.

4.15 Regional plans

4.15.1 Operative Regional Plan

- [123] The relevant operative plan is the RPW:O which I have had regard to in sections 4.1 to 4.11 of this Decision. The chapter of most relevance is Chapter 6 Water Quantity.⁹⁴ The introduction to Chapter 6 outlines that the water allocation and minimum flow provisions are intended to provide for the maintenance of aquatic ecosystems and natural character values while providing for sustainable use.
- [124] Mr Horrell addressed the provisions of the RPW:O, concluding that the application was consistent with them, subject to the imposition of suitable conditions of consent. ⁹⁵ Mr Nicolson agreed. ⁹⁶ I note that in the recent *Lindis* decision the Court found the RPW:O to be "out of date" because it did not give effect to the NPSFM or the RPS. ⁹⁷ I have nevertheless had regard to the Mr Horrell's assessment and generally concur with it.
- [125] In terms of RPW:O matters not addressed earlier in this Decision, I note that RPW:O Policy 6.4.0C is to promote and give preference, as between alternative sources, to the take and use of water from the nearest practicable source. I understand that the only other possible alternative water sources are either from the Clutha River/Mata-au or groundwater, neither of which are practical in this case. Mr Porter

⁸⁹ Clutha District Council vs Otago Regional Council ENV-2019-CHC-132 at [25].

⁹⁰ Section 42A Report, section 8.8.

⁹¹ Section 42A Report, section 8.3.6, page 47.

⁹² EIC Nicolson, paragraph 65.

⁹³ EIC Vial, paragraph 54.

⁹⁴ Also relevant are Chapter 4 (Kai Tahu ki Otago Water Perspective and Chapter 5 Natural and Human Use Values of Lakes and Rivers).

⁹⁵ Section 42A Report, section 8.3.7, page 52.

⁹⁶ EIC Nicolson, paragraph 66.

⁹⁷ Lindis at [117].

advised that the Deemed Permits are unable to be replaced with a bore as it would be uneconomic to pump water 7.1 kilometres uphill to where the Bendigo Creek water is used to supply stock water and irrigation water on the 100 hectares used for sheep and beef farming.⁹⁸

4.15.2 Proposed Plan Change 7

- [126] PPC7 was notified by the ORC on 18 March 2020 and again by the EPA in July 2020. The Bendigo application was lodged in February 2020 and consequently under s88A(1A) of the RMA the application's consent categories are governed by the operative RPW:O which was in force when the application was lodged. However, the PPC7 rules affect water quantity and so under RMA s86B(3) the PPC7 rules have immediate legal effect. Consequently, PPC7 Rule 10A.3.2.1 (non-complying activity) also applies to the application. I discussed s104D matters in section 3.5 of this Decision.
- [127] Under s88A(2)⁹⁹ the objectives and policies in PPC7 must be had regard to, notwithstanding that they have yet to proceed through the First Schedule process.
- [128] PPC7 Objective10A.1.1 is procedural only.
- [129] Policy 10A.2.1 applies to the replacement of the applicant's Deemed Permits. Importantly, Policy 10A.2.1(b) requires there to be no increase in the area under irrigation. That means that any land that was not currently being irrigated (namely land targeted for future development) cannot be allocated any water as primary allocation. I discussed the implications of that in sections 4.1 and 4.2 of this Decision.
- [130] Policy 10A.2.1(c) requires there to be no increase in the instantaneous rate of abstraction (namely the rate of take in L/s). That is the case here for the primary allocation.
- [131] Policy 10A.2.1(d) requires any existing residual flow, minimum flow and take cessation conditions to essentially be 'rolled over'. There were no such conditions on the two Deemed Permits.
- [132] Policy 10A.2.1(e) requires that there is a reduction in the volume of water allocated. In this case the applicant will be granted monthly and annual primary allocation limits that are significantly lower than what the two Deemed Permits would allow to be taken and on that basis the policy requirement is met.
- [133] I discuss Policies 10A.2.2 and 10A.2.3 in section 6 of this Decision.

4.16 Iwi and hapū management plans

[134] The "Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 - The Cry of the People, Te Tangi a Tauira" is relevant, as are the Kāi Tahu ki Otago Natural Resource Management Plan 2005 and the Te Runanga o Te Ngāi Tahu's Freshwater Policy. I consider that the application is in general accordance with the provisions of those documents, particularly those relating to water take measuring devices, consent durations not exceeding 25 years, justifiable volumes of abstraction being used efficiently, and avoiding compromising fishery and biodiversity values. All of those matters have been considered earlier in this Decision.

4.17 Other matters

[135] Mr Horrell initially noted that there is a periodic overflow of water via an operational spillway on the southern end of Bendigo Pond and that this spilled water returns to Bendigo Creek. He considered that the overflow channel is not expressly necessary and leads to water wastage. He recommended a condition requiring the applicant cease the Bendigo Pond overflow discharge within 2 years of the first exercise of the consent.

⁹⁸ EIC Porter, paragraph 4.2.

⁹⁹ Which cross-refers to RMA s104(1)(b).

- [136] Mr Porter advised that the spillway is the remains of the old water race that returned surplus water and runoff water to Bendigo creek. The spillway continues to be utilised to supply stock water to three paddocks and the Bendigo Creek river bed block which is grazed under grazing license from DOC.¹⁰⁰
- [137] In his 'Right of Reply Report' Mr Horrell revised his opinion on his matter, conceding that the overflow does serve an important function in ensuring the safe operation of the dam and minimises potential for an uncontrolled release of water. He also accepted that the overflow serves an important function in ensuring the safe operation of the dam and minimises potential for an uncontrolled release of water. On that basis he recommended deletion of Condition 4 of RM20.079.01.¹⁰¹
- [138] I am not persuaded that the cessation of the spillway is either necessary or appropriate given that the discharge is a permitted activity and the water either returns to its source waterbody or is used for stock drinking purposes. As pointed out by counsel, and now accepted by Mr Horrell, the spillway operates to reduce any uncontrolled release of water over the embankments, which may cause damage to the surrounding property. The spillway therefore operates as a "safety valve" to ensure that the level of the dam can be maintained. Removing the ability to utilise the spillway for this purpose increases the risk of uncontrolled releases from the dam.¹⁰²
- [139] I therefore accept Mr Horrell's revised recommendation to omit condition 4 on consent RM20.079.01.
- [140] There are no other relevant matters that I am aware of.

5 Part 2 matters

- [141] I note that in the recent *Lindis* decision the Court concluded that notwithstanding the Court of Appeal decision in *RJ Davidson Family Trust v Marlborough District Council*, it was desirable to assess Part 2 matters because of inconsistencies in the RPW:O. I take the same approach here, noting that s5 is not itself an operative provision.¹⁰³.
- The natural character values of Bendigo Creek will be sustained by the residual flow (s6(a)). Similar conclusions can be made regarding its amenity values (s7(c)), the quality of its environment (s7(f)) and Bendigo Creek at the point of take does not provide habit for trout (s7(h)). The applicant utilises efficient irrigation methods, so in that regard the efficient use of water is addressed (s7(b)). The imposition of monthly and annual allocation limits will have particular regard to the finite characteristics of the water resource (s7(g)). The abstractions will not affect any outstanding natural features or landscapes (s6(b)) and Bendigo Creek does not support any significant habitats of indigenous fauna that require protection (s6(c)). I understand there is limited public access currently available (s6(d)). I have sought to recognise and provide for the relationship of Maori and their culture and traditions with the Creek within the extent of the relief sought by submitter Aukaha (ss6(e), 7(a) and 8).
- [143] I find that a consideration of Part 2 matters does not weigh against a grant of consent provided appropriate consent conditions are imposed.

6 Consent Duration

[144] The applicant seeks a consent duration of 15 years. Aukaha initially sought a duration of 6 years (based as I understand it on PPC7 Policy 10A.2.3 amongst other things). Mr Horrell recommended a consent term of 15 years for RM20.079.01 and RM20.079.03 and a term of 6 years for RM20.079.02. For the applicant, Mr Nicolson reluctantly accepted those recommended durations. 104

¹⁰⁰ EIC Porter, paragraph 5.2.

¹⁰¹ Horrell Right of Reply Report, paragraphs 13 and 14.

¹⁰² Legal submissions, paragraph 18.

¹⁰³ Environmental Defence Society v NZ King Salmon [2014] NZSC 38 at [8] and [149].

¹⁰⁴ EIC Nicolson, paragraphs 76 and 77.

- Policy 6.4.19 of the RPW:O addresses consent durations for consents to take and use water. It does not recommend actual durations but instead contains seven criteria for me to consider. In this case the proposed long-term purpose of the abstractions is enduring, namely domestic use, stock drinking water and irrigation (criteria (a)). There is no Schedule 2A catchment minimum flow for Bendigo Creek primary allocation takes (criteria (b)) and if the RPW:O is ever changed to include a minimum flow then that can be imposed under RMA s128(1)(b). I note that as a result of the RMA Amendment Act 2020, s128(1)(b) now explicitly refers to regional plan minimum flows. A minimum flow will be imposed for the supplementary takes. So, criteria (a) and (b) favour a longer duration.
- [146] Climatic variability is certain to occur (criteria (c)). Based on the climate change projections for the Otago region prepared by the Ministry for the Environment in 2018 and available on their website, temperatures (and therefore evapotranspiration) are expected to increase and while precipitation may also increase, changes in the timing (largest increases in winter and spring) and form (more rain and less snow) may reduce water security in the region. More frequent droughts are predicted, which may reduce instream flows. Despite these flow related uncertainties, the applicant has not proposed adaptive management (criteria (e)). Criteria (c) and (e) therefore favour a shorter duration in my view.
- [147] On the evidence I have found there are no significant adverse effects arising from the proposal (criteria (d)) and so that favours a longer duration. The applicant has invested heavily in irrigation infrastructure (criteria (f)) and they utilise an efficient water conveyance and irrigation system (criteria (g)). These criteria favour a longer duration.
- [148] In my subjective view Policy 6.4.19 alone would weigh in favour of a duration within the range of 15 to 25 years. I also record my view that allocation volumes and residual flows are both matters that can be revisited in the future if a suitably worded s128 review condition is imposed, which will be the case here.
- [149] However, as alluded to in section 4.15.2 of this Decision, PPC7 Policy 10A.2.3 is relevant.
- [150] For the replacement of deemed permits, PPC7 Policy 10A.2.3 is to not grant a duration exceeding six years, irrespective of any other policies in the Plan, except where Rule 10A.3.2.1 applies and the abstraction will have no more than minor adverse effects (including no more than minor cumulative effects) on the ecology and the hydrology of the surface water body (and any connected water body) from which the abstraction is to occur and the resource consent granted will expire before 31 December 2035. PPC7 Rule 10A.3.2.1 does apply 105 and on the weight of evidence before me I have concluded that the applicant's primary allocation abstraction will have no more than minor adverse effects on the ecology and the hydrology of Bendigo Creek, particularly due to the absence of fishery values.
- [151] That leaves Policy 10A.2.3(b) requiring the replacement consent to expire before 31 December 2035. PPC7 is at the commencement of its RMA Schedule 1 process and normally that would lead me to assign it little weight. However, Policy 10A.2.3(b) is a very directive policy and its application results in a consent duration of $\approx 14 \frac{1}{2}$ years from the date of grant. In my experience a duration of that order is not inconsistent with irrigation water take durations commonly granted in other regions and it is close to the range (albeit at the lower end) of durations indicated as being suitable by my assessment of RPW:O Policy 6.4.19.
- [152] Lending weight to my assessment, I note that in a recent Environment Court decision that addressed PPC7, the Court stated that PPC7 Policy 10A.3.2 is plainly directive and that to the extent that the matters listed in Policy 6.4.19 are relevant, they are to be considered in addition to Policy 10A.3.2. The Court decided to give weight to Policy 10A.2.3 and apply the policy according to its tenor. ¹⁰⁶ Counsel advised ¹⁰⁷ that decision is subject to appeal but it nevertheless stands at this point in time.

¹⁰⁵ Although it has no material effect as the applications remains a discretionary activity.

¹⁰⁶ Clutha District Council vs Otago Regional Council ENV-2019-CHC-132 at [35 and 36].

¹⁰⁷ Legal submissions, paragraph 27.

- [153] Consequently, I find the primary allocation consent should expire on 30 December 2035.
- [154] In that regard I note that for Aukaha Mr Vial helpfully advised "... the primary take will support Te Mana o te Wai, subject to a condition tying the activity to the use of the existing infrastructure. Therefore, I consider that a consent term for the primary take that expires in 2035 is acceptable."
- Turing to the supplementary takes, PPC7 Policy 10A.2.2 is relevant. As discussed earlier in this Decision I consider the supplementary takes to be "new resource consents" and so these can only be granted a duration of no more than six years. That leads to an expiry date of 17 May 2027.
- [156] With regard to s113(1)(b) of the RMA, the reason for deciding on a shorter duration than that sought by the applicant in their RCA is the application of RPW:O Policy 6.4.19 and thereafter having regard to the very directive Policies 10A.2.3(b) and 10A.2.2 of PPC7 to the RPW:O.

7 Consent Conditions

- [157] I was provided with recommended consent conditions by Mr Horrell. I have amended the conditions in light of my findings that are set out in this Decision. The amended conditions are attached as Appendix 1 and are based on the conditions originally included in the Section 42A Report. Instructions regarding the deletion of some photographs included in those conditions are shown in red font.
- [158] I have amended Consents RM20.079.01 and 02 to refer to irrigating "up to 182.4 ha of land" as the primary allocation water and the supplementary allocation water will be indistinguishable once they are in Bendigo Pond. I have also omitted recommended condition 8(b) and Appendix 2 from RM20.079.01 as there is no need to dictate where the irrigable areas are located as long as an upper limit is imposed on the area able to be irrigated. I also note that the actual site of the vineyard yet to be developed may conceivably vary from that shown in Appendix 2.
- I have omitted Condition 5(b) from consent RM20.079.01 for the reasons given by Mr Vial, namely that there is no certainty that a shift to an unspecified future method of take would provide a similar residual flow to that provided by the current intake structure 109 and so there is no certainty that this would continue to give effect to Te Mana o te Wai. 110 In saying that I note that the requirements of Condition 5(a) of consent RM20.079.02 are very specific (including photographs of the existing intake arrangement) and so any future alteration of the intake will presumably need to be authorised by a 127 application to change Condition 5(a). That provides a sufficient safeguard for ensuring that the residual flow discussed in section 4.3 of this Decision is maintained.
- [160] I have omitted conditions from RM20.079.02 that unnecessarily duplicate those in RM20.079.01 as a simple cross-referral is sufficient.
- [161] I have simplified the 'dam safety' conditions recommended for RM20.079.03 in light of my discussion in section 4.10 of this Decision.
- [162] Given the substantial amendments that I have made to the recommended conditions, it is conceivable that they may errors including those of a numerical, grammatical or cross-referencing nature. Accordingly, should the applicant or the ORC identify any minor mistakes or defects in the attached conditions, then I am prepared to issue an amended schedule of conditions under s133A of the RMA correcting any such matters. Consequently, any minor mistakes or defects in the conditions should be brought to my attention prior to the end of the 20-working day period specified in section 133A of the RMA.

¹⁰⁸ EIC Vial, paragraph 10.

¹⁰⁹ EIC Vial, paragraph 69.

¹¹⁰ EIC Vial, paragraph 71.

8 Determination

- [163] My determination on the application is set out below. My reasons are detailed in the body of this Decision, but in summary they include:
 - (a) a reduction in the currently consented rates of primary allocation abstraction (L/s);
 - (b) a continuous residual flow below the point of take;
 - (c) the imposition of monthly and annual primary allocation limits;
 - (d) efficient water conveyance and irrigation practices;
 - (e) no more than minor adverse effects on the health and well-being of Bendigo Creek; and
 - (f) the imposition of a Bendigo Creek minimum flow below which the supplementary take will not be able to occur.
- [164] I **grant** the application lodged by Bendigo Station Limited for the purposes of irrigation, domestic supply and stock drinking water supply subject to the conditions contained in Appendix 1.

Signed by the commissioner:

Rob van Voorthuysen

Dated: 24 May 2021

APPENDIX 1: CONSENT CONDITIONS



Our Reference: A1400994 Consent No. RM20.079.01

WATER PERMIT

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

Name: Bendigo Station Limited

Address: 1460 Tarras-Cromwell Road, RD 3, Cromwell

To take and use surface water as a primary allocation from Bendigo Creek for the and to retake and use water from the Bendigo Station Pond for the purposes of irrigation, stock water supply and domestic supply.

For a term expiring on 30 December 2035 15 years from commencement of this consent

Locations of Points of Abstraction:

Bendigo Creek: approximately 5.7 kilometres south east of the intersection of Bendigo Loop Road and

Tarras-Cromwell Road (State Highway 7).

Bendigo Station Pond: Approximately 4 kilometres south east of the intersection of Bendigo Loop Road and Tarras-Cromwell Road (State Highway 7).

Legal Description of land at point of abstraction:

Bendigo Creek: Section 21 SO 24641

Bendigo Station Pond: Lot 8 DP 517385

Legal Description of land s where water is to be used: Lot 6 DP 525495, Lot 5 DP 517385, Lot 3 DP 391334, Lot 4 DP 391334, Part Lot 10 DP 391334, Lot 8 DP 517385, Lot 3 DP 459561, Lot 7 DP 517385, Lot 3 DP 525495, Lot 4 DP 525495, Lot 1 DP 525495, Lot 2 DP 525495 and Lot 6 DP 517385

Map Reference at point of abstraction:

Bendigo Creek: NZTM 2000: E1314483 N5018116

Bendigo Station Pond: NZTM 2000: E1313447 N5019532

Conditions

Specific

 a) The take and use of surface water from Bendigo Creek and to retake primary allocation water from a reservoir for the irrigation of <u>up to 182.4</u> 100 hectares of <u>land pasture</u>, stock water supply and domestic supply at the map references and land legally described above 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 RM20.079:

- (i) The application and supporting information received by the Consent Authority on 10 March 2020 and addendums to application made on 22 May 2020 and 8 October 2020; and
- (ii) Further information response received on 14 May 2020; and
- (iii) Hearing evidence [Date] February 2021.
- b) If there are any inconsistencies between any conditions of this consent and the application, the conditions of consent must prevail.
- 2. This permit must not be exercised until Deemed Permits WR1233CR and WR3908CR have been surrendered or expired.
- 3. a) The rate of abstraction as primary allocation must not exceed 50 litres per second.
 - b) The volume of abstraction as <u>primary allocation</u> under this permit must not exceed:
 - (i) 132,000 cubic metres per month; and
 - (ii) 857,778 cubic metres in each 12-month period, commencing 1 July of any year and ending 30 June of the following year.
- 4. This consent only authorises water to be by-washed via the reservoir spillway into Bendigo Creek as shown in **Appendix 1** of this permit until [2 years after commencement date]. The Consent Holder must provide written notice within 20 working days of 23 November 2022 to the Consent Authority that the by-wash has ceased and details of how water is retained within the reservoir.
- 5. a) The method for taking water at NZTM 2000 E1314483 N5018116 must be via an open pipe positioned above the bed of Bendigo Creek as described in the Application and Assessment of Environmental Effects received by the Consent Authority on 10 May 2020 and as shown in **Appendix 1. 2**, unless clause (b) applies.
 - b) The method for taking water at NZTM 2000 E1314483 N5018116 may be modified, provided the following is adhered to:
 - (i) A continuous connected residual flow is maintained at all times immediately downstream of the point of take for a distance of no less than 750 metres:
 - (ii) The Consent Authority is notified of the change in method of taking no less than 15 working days before any changes to the intake are undertaken; and
 - (iii) The Consent Holder must notify the Consent Authority in writing of the completion of the intake establishment no less than 10 working days following completion of works as outlined in (ii), and must provide photographs of the nee method of intake. Photographs must be in colour and be no smaller than 200 x 150 millimetres in size and be in JPEG form.



Performance Monitoring

- 6. a) Prior to the first exercise of this consent, The Consent Holder must install maintain the existing flow monitoring meter WM1515 to:
 - (i) A water meter that will measure the rate and the volume of water taken under this consent and consent RM20.079.02 to within an accuracy of +/- 5% over the meter's nominal flow range. The water meter must be capable of output to a datalogger.
 - aa) At the existing flow monitoring meter WM1515 site the Consent Holder must maintain:
 - (i) A datalogger that time stamps a pulse from the flow meter at least once every 15 minutes and has the capacity to hold at least twelve months data of water taken.
 - (ii) 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 water meter / datalogger/telemetry unit, any subsequent replacement of the water meter / datalogger/telemetry unit and at 5-yearly intervals from the commencement of consent 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 water meter / 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 ensure the water meter returns accurate readings at all times including by routinely checking the device and removing any ice or debris build up.
 - g) The Consent Holder must report any malfunction of the water meter / 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 of any physical repairs, 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.
- 7. A water use efficiency report must be provided to the Consent Authority 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 12



months in respect of the efficient use of water for the purposes consented. This report must include, but not necessarily be limited to, the following:

- Area and crop type <u>irrigated including a scaled map, aerial photograph (or Goggle Earth image)</u> of the <u>irrigated areas</u>, number of harvests per year, and timing;
- b) Annual summary of the monthly volume of water abstracted from Bendigo Creek as either primary allocation or supplementary allocation water usage (month by month, and related to crops in the ground);
- c) Reasons why use may have varied from the previous year;
- d) Information demonstrating irrigation equipment that has been used and decision-making regarding efficiency of use (e.g. soil moisture data, irrigation scheduling, meter accuracy checks, computer control of irrigation) and any changes planned for the coming year;
- e) Measures undertaken to avoid loss or wastage of water including any bypass of water;
- f) Any changes or modifications to irrigation (and water conveyance) infrastructure; and
- g) Water conservation steps taken.

General

- 8. The Consent Holder must take all practicable steps to ensure that at all times:
 - a) There is no leakage from pipes and structures;
 - b)The use of water is confined to targeted areas, as illustrated on the attached plan as **Appendix 3** to this consent with the exception of the area identified in red;
 - e) b) 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) c) That irrigation to of land must not occur when the moisture content of the soils is at or above field capacity.
 - e)Prior to the first exercise of this consent, the Consent Holder, the Consent Holder must install a backflow prevention device to ensure water and/or contaminants cannot return to the water source.

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 resource consent within three months of each anniversary of the commencement of this resource consent or within two months of any enforcement action taken by the Consent Authority in relation to the exercise of this resource consent, for the purpose of:
 - a) Determining whether the conditions of this resource consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the resource consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the resource consent;



- Ensuring the conditions of this resource consent are consistent with any National Environmental Standards, relevant plans, and/or the Otago Regional Policy Statement;
- c) Reviewing the frequency of monitoring or reporting required under this resource consent:
- d) Reducing the consented instantaneous rate of abstraction, maximum monthly abstraction volume, and/or maximum annual abstraction volume (Condition 3); and/or changing the monitoring, operating, and reporting requirements (Conditions 5 and 6), in response to and/or to implement:
 - (i) the results of monitoring carried out under this resource consent;
 - (ii) water availability, including alternative water sources;
 - (iii) actual water use;
 - (iv) efficiency of water use;
 - surface water allocation limits and minimum flows set out in any future regional plan, including any review of the Regional Plan: Water for Otago;
 - (vi) surface water quality limits set out in any future regional plan, including any review of the Regional Plan: Water for Otago; and/or
 - (vii) new statutory requirements for measuring, recording or data transmission.
 - e) Imposing a minimum flow restriction as a condition on this resource consent if and when an operative regional plan sets a minimum flow for the catchment.

Notes to Consent Holder

- 1. If you require a replacement water permit upon the expiry date of this water permit, any new application should be lodged at least 6 months prior to the expiry date of this water permit. Applying at least 6 months before the expiry date may enable you to continue to exercise this permit until a decision is made on the replacement application. Failure to apply at least 3 months in advance of the expiry date may result in any primary allocation status being lost. A late application may result in the application being treated as supplementary allocation if any such allocation is available.
- 2. For the purposes of Condition 7 8, 'Field Capacity' means the amount of water that is able to be held in the soil after excess water has runoff.
- 3. 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 following Drinking Water Standards
- 4. For the purposes of Condition $\frac{5}{6}$, 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.
- 5. 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.
- 6. The Consent Holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, the Biosecurity Act 1993, the Conservation Act 1987, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.
- 7. Under section 125 of the RMA, this consent lapses five years after the date it is granted unless:
 - a. The consent is given effect to; or
 - b. The Consent Authority extends the period after which the consent lapses.
- 8. Where information is required to be provided to the Consent Authority, this is to be provided in writing to watermetering@orc.govt.nz, and the email heading is to reference RM20.079.01 and the condition/s the information relates to.
- 9. The Consent Holder will be required to pay the Consent Authority an annual administration and monitoring charge to recover the actual and reasonable costs incurred to ensure ongoing compliance with the conditions attached to this consent, collected in accordance with Section 36 of the Resource Management Act 1991.
- 10. The consent holder must be aware of any rules that relate to the control of farm contaminants in runoff and leaching of nutrients to groundwater in relevant Otago regional plans and National Environmental Standards.
- 11. 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.



Appendix 1 to Water Permit RM20.079.01: By wash location



(Note aerial photograph is also to be deleted)



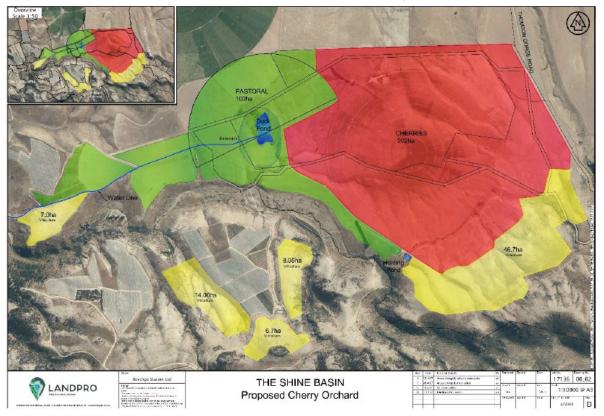
Appendix $\frac{1}{2}$ to Water Permit RM20.079.01: Photographs (two) showing intake structure







Appendix 2 to Water Permit RM20.079.01: Irrigation Areas



(Note aerial photograph is also to be deleted)



Our Reference: A1400995 Consent No. RM20.079.02

WATER PERMIT

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

Name: Bendigo Station Limited

Address: 1460 Tarras-Cromwell, RD 3, Cromwell

To take and use surface water as a supplementary allocation from Bendigo Creek and to retake and use water from a reservoir for the purpose of irrigation, stock water supply and domestic supply

For a term expiring 6 years from the commencement date on 24 May 2027.

Locations of Points of

Abstraction:

Bendigo Creek: approximately 5.7 kilometres south east of the intersection of Bendigo Loop Road and

Tarras-Cromwell Road (State Highway 7).

Bendigo Station Pond: Approximately 4 kilometres south east of the intersection of Bendigo Loop Road and Tarras-Cromwell Road (State Highway 7).

Legal Description of land at point of abstraction:

Bendigo Creek: Section 21 SO 24641

Bendigo Station Pond: Lot 8 DP 517385

Legal Description of land where water is to be used: Lot 6 DP 525495, Lot 5 DP 517<u>3</u>85, Lot 3 DP 391334, Lot 4 DP 391334, Part Lot 10 DP 391334, Lot 8 DP 517385, Lot 3 DP 459561, Lot 7 DP 517385, Lot 3 DP 525495, Lot 4 DP 525495, Lot 1 DP 525495, Lot 2 DP 525495 and Lot 6 DP 517385

Map References at points of abstraction:

Bendigo Creek: NZTM 2000: E1314483 N5018116

Bendigo Station Pond: NZTM 2000: E1313447 N5019532

Conditions

Specific

1. a) The take and use of surface water as supplementary allocation from Bendigo Creek and the retake and use of water from a reservoir for the irrigation of <u>up</u> to 182.4 hectares <u>of land</u>, stock water supply and domestic supply at the map references and land legally described above 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 RM20.079:



- (i) The application and supporting information received by the Consent Authority on 10 March 2020 and addendums to application made on 22 May 2020 and 8 October 2020; and
- (ii) Further information response received on 14 May 2020; and
- (iii) Hearing evidence [Date] Month 2020.
- b) If there are any inconsistencies between any conditions of this consent and the application, the conditions of consent must prevail.
- 2. This Consent must only be exercised in conjunction with Water Permit RM20.079.01.
- 3.2. The rate of abstraction as supplementary allocation must not exceed 110 L/s:
 - a) 100 litres per second when flows in Bendigo Creek at NZTM 2000 E1314218 N5018598 are at or above 50 litres per second;
 - b) 110 litres per second when flows in Bendigo Creek at NZTM 2000 E1314218 N5018598 are at or above 150 litres per second.
 - c) 160 litres per second combined with Water Permit RM20.079.01 when flows in Bendigo Creek at NZTM 2000 E1314218 N5018598 are at or above 430.6 litres per second:
- 4. 3. The combined volume of abstraction from Bendigo Creek as supplementary allocation in conjunction with RM20.079.01 must not exceed:
 - a) 235,948 cubic metres per month; and
 - b) 1,054,714 196,936 cubic metres in each 12-month period, commencing 1 July of any year and ending 30 June of the following year.
- 5. 4. This consent must not be exercised when the flows in Bendigo Creek at NZTM 2000 E1314218 N5018598 at the river flow recorder required under Condition 5 of this Consent is below 120 L/s.

Performance Monitoring

- 6. 5. a) Prior to the first exercise of this consent, The Consent Holder must at their own expense, install, operate and maintain a river flow recorder (sensor, logger, and associated equipment) within 20 metres of NZTM 2000 E1314218 N5018598.
 - b) Within 3 months of the commencement of this consent installing the recorder, and then at a minimum of five yearly intervals, the location, structures and equipment to be used for the purpose of determining flows as required by Condition 6 5(a) must be verified and provide written certification to the Consent Authority assigned by a suitably qualified and experienced person.
 - c) <u>The verification must demonstrate</u> and demonstrating by means of a clear diagram, that:
 - (i) the recorder 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 recorder has been verified as accurate.



- d) The Consent Holder shall provide evidence of the verification required by Condition § 5(b) in writing to the Consent Authority within one month of the verification being completed.
- e) All malfunctions of the flow recorder during the exercise of this consent shall be repaired and reported to the Consent Authority within 5 working days of discovery by the Consent Holder or notification to the Consent Holder. In the event of an equipment malfunction the consent holder must cease the taking of supplementary allocation.
- f) The recorder must be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions.
- g) The Consent Holder must ensure the recorder returns accurate readings at all times including by routinely checking the device and removing any ice or debris build up.
- h) The flow recorder and the surrounding waterway must be available at all reasonable times for inspection by the Consent Authority for the purposes of assessing compliance with the conditions of this consent.
- i) The flow recorder must record water flow at intervals of 15 minutes or less, and must update data at least daily to a database which is accessible to authorised users, including the Consent Authority.
- 7. a) Prior to the first exercise of this consent, the Consent Holder must install:
 - (i) Water meter that will measure the rate and the volume of water taken to within an accuracy of +/- 5% over the meter's nominal flow range. The water meter must be capable of output to a datalogger.
 - (ii) A datalogger that time stamps a pulse from the flow meter at least once every 15 minutes and has 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) 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 water meter / datalogger/ telemetry unit, any subsequent replacement of the water meter / datalogger/ telemetry unit and at 5-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 water meter / 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 ensure the water meter returns accurate readings at all times including by routinely checking the device and removing any ice or debris build up.
- g) The Consent Holder must report any malfunction of the water meter / 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 of any physical repairs, 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.

Review

- 8.6. 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 resource consent within three months of each anniversary of the commencement of this resource consent or within two months of any enforcement action taken by the Consent Authority in relation to the exercise of this resource consent, for the purpose of:
 - a) Determining whether the conditions of this resource consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the resource consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the resource consent;
 - Ensuring the conditions of this resource consent are consistent with any National Environmental Standards, relevant plans, and/or the Otago Regional Policy Statement;
 - c) Reviewing the frequency of monitoring or reporting required under this resource consent;
 - d) Reducing the consented instantaneous rate of abstraction, maximum monthly abstraction volume, and/or maximum annual abstraction volume (Conditions 2 and 3); or altering the minimum flow (Condition 4 5); and/or changing the monitoring, operating, and reporting requirements (Conditions 6 and 7), in response to and/or to implement:
 - (i) the results of monitoring carried out under this resource consent;
 - (ii) water availability, including alternative water sources;
 - (iii) actual water use;
 - (iv) efficiency of water use;
 - surface water allocation limits and minimum flows set out in any future regional plan, including any review of the Regional Plan: Water for Otago;
 - (vi) surface water quality limits set out in any future regional plan, including any review of the Regional Plan: Water for Otago; and/or
 - (vii) new statutory requirements for measuring, recording or data transmission.
 - e) Imposing a <u>different</u> minimum flow restriction as a condition on this resource consent if and when an operative regional plan sets a minimum flow for the catchment.



Notes to Consent Holder

- 1. Note: the water meter, data logger, telemetry unit sand river flow recorder required by Condition 5 must 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.
- 2. 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 following Drinking Water Standards.
- 3. 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 following Drinking Water Standards
- 4. For the purposes of Condition 5, 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.
- 5. 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.
- 6. The Consent Holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, the Biosecurity Act 1993, the Conservation Act 1987, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.
- 7. Under section 125 of the RMA, this consent lapses five years after the date it is granted unless:
 - a. The consent is given effect to; or
 - b. The Consent Authority extends the period after which the consent lapses.
- 8. Where information is required to be provided to the Consent Authority, this is to be provided in writing to watermetering@orc.govt.nz, and the email heading is to reference RM20.079.02 and the condition/s the information relates to.
- 9. The Consent Holder will be required to pay the Consent Authority an annual administration and monitoring charge to recover the actual and reasonable costs incurred to ensure ongoing compliance with the conditions attached to this consent, collected in accordance with Section 36 of the Resource Management Act 1991.
- 10. The consent holder must be aware of any rules that relate to the control of farm contaminants in runoff and leaching of nutrients to groundwater in relevant Otago regional plans and National Environmental Standards.



11. 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.



Our Reference: A1400996 Consent No. RM20.079.03

WATER PERMIT

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

Name: Bendigo Station Limited

Address: 1460 Tarras-Cromwell, RD 3, Cromwell

To dam water within a reservoir for the purpose of irrigation, stock water supply and domestic supply

For a term expiring on 30 December 2035 15 years from commencement of this consent

Location of Damming: Approximately 4 kilometres south east of the

intersection of Bendigo Loop Road and Tarras-

Cromwell Road (State Highway 7).

Legal Description of land at point of damming: Lot 8 DP 517385

Map Reference at point of damming: NZTM 2000: E1313447 N5019532

Conditions

Specific

- a) The damming of water within a reservoir at the map references and land legally described above 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 RM20.079:
 - The application and supporting information received by the Consent Authority on 10 March 2020 and addendums to application made on 22 May 2020 and 8 October 2020;
 - (ii) Additional application received by the Consent Authority on 26 May 2020 and addendum provided 11 June 2020; and
 - (iii) Further information response received on 14 May 2020; and
 - (iv) Hearing evidence [Date] Month 2020.
 - b) If there are any inconsistencies between any conditions of this consent and the application, the conditions of consent must prevail.
- Water taken and used by this consent must be restricted to surface water contained within the reservoir identified as "inner pond" as shown in Appendix 1.
- 3 2. The maximum volume of water impounded must not exceed 53,820 cubic metres.
- 4 3. The Consent Holder must inspect the dam at regular intervals not exceeding two months and immediately notify the Consent Authority if the Consent Holder



has reasonable grounds for considering that the dam is, or has become, dangerous the dam shows signs of internal erosion through slumping of the embankment or excessive seepage through the dam face.

Performance Monitoring

- 5. a) Within the first anniversary of the exercise of this consent, and every 5 years thereafter, the Consent Holder must review the dam's classification.
 - b) The Consent Holder must also review the dam's classification if, at any time:
 - (i) any building work that requires a building consent is carried out on the dam; and
 - (ii) the building work results, or could result, in a change to the potential impact of a failure of the dam on person, property, or the environment.
 - c) In reviewing the classification of the dam, the Consent Holder must:
 - (i) apply the criteria and standards for dam safety set out in the New Zealand Dam Safety Guidelines 2015 published by the New Zealand Society of Large Dams (NZSOLD);
 - (ii) give the dam one of the following classifications: low potential impact, medium potential impact or high potential impact; and
 - (iii) submit the classification of the dam to a Chartered Professional Engineer experienced in dam safety for audit.
 - d) Within one month of the review, the consent holder must provide the Consent Authority with the classification given by the consent holder to the dam and a certificate from a Recognised Engineer that:
 - (i) states that the classification of the dam accords with the New Zealand Dam Safety Guidelines 2015; and
 - (ii) states that the engineer is a Chartered Professional Engineer experienced in dam safety.
 - e) If the review changes the classification of the dam from low potential impact to medium potential impact or high potential impact, the Consent Authority may review the conditions of this consent to impose conditions relating to dam safety. Conditions must be consistent with any relevant National Environmental Standards, Regulations, plans and/or the Otago Regional Policy Statement.

General

- 6 4. The dam <u>and</u> spillway and <u>associated structures</u> must be operated and maintained to ensure that, at all times, they are structurally sound, pose no undue risk to human life, property, or the natural environment, and are able to perform satisfactorily to their approved design standard.
- 7. The damming of water must not cause flooding, erosion, land instability, sedimentation, or property damage of any other person's property.

Review

8 <u>5</u>. 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 resource consent within three months of each anniversary of the commencement of this resource consent or within



two months of any enforcement action taken by the Consent Authority in relation to the exercise of this resource consent, for the purpose of:

- a) Determining whether the conditions of this resource consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the resource consent and which it is appropriate to deal with at a later stage, or which becomes evident after the date of commencement of the resource consent;
- b) Ensuring the conditions of this resource consent are consistent with any National Environmental Standards, relevant plans, and/or the Otago Regional Policy Statement;
- c) Reviewing the frequency of monitoring or reporting required under this consent:
- d) Reviewing the need for public liability insurance cover to be held by the Consent Holder;
- e) Reviewing the conditions of this consent to impose conditions relating to dam safety if the potential impact classification of the dam changes from low to medium or low to high, in accordance with Condition 5.

Notes to Consent Holder

- 1. For the purposes of Condition 5, a Recognised Engineer means: an engineer described in Section 149 of the Building Act 2004, and has some or all of the following competencies:
 - geotechnical principles;
 - design principles including structural, geotechnical, seismic, hydrologic and hydraulic principles;
 - dam construction techniques;
 - · operation and maintenance of dams;
 - surveillance processes;
 - response to dam safety issues;
 - · emergency planning and emergency response;
 - · resolution of potential dam safety deficiencies; and
 - dam safety critical plant systems.
- 2. The Consent Holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, the Biosecurity Act 1993, the Conservation Act 1987, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.
- 3. The Consent Holder will be required to pay the Consent Authority an annual administration and monitoring charge to recover the actual and reasonable costs incurred to ensure ongoing compliance with the conditions attached to this consent, collected in accordance with Section 36 of the Resource Management Act 1991.
- 4. The consent holder must be aware of any rules that relate to the control of farm contaminants in runoff and leaching of nutrients to groundwater in relevant Otago regional plans and National Environmental Standards.

