UNDER The Resource Management Act 1991

AND

IN THE MATTER OF Resource consent application CRC155773 by Infinity

Investment Group Limited to take and use surface water.

JOINT DECISION OF HEARING COMMISSIONERS EMMA CHRISTMAS AND HUGH THORPE 4 September 2015

DECISION

1. Under our delegated authority from the Canterbury Regional Council to hear and decide this application, we refuse resource consent CRC155773, to take and use surface water from the Hakataramea River.

THE HEARING

2. These applications were heard on 3 - 4 August 2015 at the Environment Canterbury offices, Timaru. The following appearances were recorded:

For the applicant:

Ms Lauren Semple, Counsel

Mr Tom Heller, Environmental Scientist

Mr Graeme Horrell, Engineering Hydrologist

Dr Wayne Donovan, Freshwater Ecologist

Mr Brett Giddens, Resource Management Planner

Submitters:

Ms Angela Christensen, Central South Island Fish and Game Council

Mr Mark Webb, Central South Island Fish and Game Council

Martyn Baker, Angler

Ms Pru Steven QC, Counsel for Waitaki Irrigators Collective and 54 other submitters

Ms Keri Johnston, Resource Management and Environmental Engineering Consultant, for Waitaki Irrigators Collective and 54 other submitters Mr Robert Sutton, Farmer

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Ms Elizabeth Soal, Policy Manager, Waitaki Irrigators Collective (WIC)

Section 42A Reporting Officers:

Ms Danielle Korevaar Ms Jacqui Todd Ms Helen Shaw, Team Leader, Surface Water Hydrology

3. The hearing was adjourned on the 4th August 2015, pending the applicant's closing submissions. This was received on 12th August, and the hearing was closed on 18th August.

BACKGROUND

- 4. Infinity Investment Group Ltd (Infinity) owns two adjacent properties on the true left bank of the Hakataramea River, Foveran and The Brothers. Foveran Deer Park operates on the properties, and is a leading deer stud and sheep station. The following consents for take and use of water are held:
 - a) CRC950601.2 a take of 26 l/s from the Hakataramea River, to irrigate up to 80 hectares.
 - b) CRC031592 a take of up to 26 L/s from a bore located close to the Hakataramea River, for irrigation of up to 65 hectares of crops and pasture.
 - c) CRC122871 to take into storage up to 2,000 L/s from the Brothers Stream, for irrigation of up to 560 hectares. The irrigation area includes the areas that can be irrigated by the previous two consents.
- 5. Consent CRC122871 is referred to in this decision as 'the Brothers consent'. It was described during this hearing as a water harvesting consent, designed to operate at higher flows.
- 6. In 2013, Infinity applied for another consent, to take water from the Hakataramea River at a rate of up to 93 L/s. This consent intended to use the remaining 'A' allocation from the Hakataramea, for irrigation of the same 560 ha that is authorised to be irrigated by the Brothers consent. It was described in the application as intending to provide additional irrigation flexibility to the entire landholding, by providing an alternative source of take with a greater reliability than the Brothers consent.
- 7. ECan determined that sufficient allocation was available within the Hakataramea A band, and determined the take was a discretionary activity. It was granted non-notified on this basis.
- 8. A neighbouring farmer, Mr Robert Sutton, instigated a judicial review of the decision on the basis that the take exceeded the A allocation limit, and was therefore a non-complying activity. He considered that other water users were potentially adversely affected and the consent should have been

- notified. The Court granted the review application and set aside ECan's decision, remitting it back to ECan for re-consideration.
- 9. The application was then amended to a reduced rate of take of 68 L/s and renotified. This is the application before us. Other amendments to the application include a reduced annual volume (now 1,602,387 m³ per year), and a change to the April to August minimum flow regime. ECan's position is now that the application exceeds the A allocation limit and is therefore a noncomplying activity.
- 10. On the basis of the reduced rate of take, the applicant argues that the application can be considered to be within the Hakataramea River A band allocation. The take will irrigate the same land as the existing Brothers consent. A proposed condition will ensure that the two permits are subject to a combined annual volume of 2,900,000 m³/year (the volume of the Brothers consent). In this way, the applicant argues that there will be no additional annual allocation taken from the Waitaki catchment.

Lower Waitaki consent process 2008-2010

- 11. Between 2008 and 2010 decisions were released on a large number of applications to take water from the Lower Waitaki catchment. These included those that had been held over while the Waitaki Catchment Water Allocation Regional Plan (WCWARP) was prepared, and applications by Meridian Energy Limited for the North Bank Tunnel Scheme (NBTC). The Lower Waitaki decisions were referred to or relied upon by several parties at the hearing.
- 12. The hearings for these applications were the first time that the provisions of the WCWARP had been tested for the lower catchment, and through the course of the hearings, the panel made a number of rulings about the plan that are relevant to this decision. In particular, that:
 - a) The environmental flow regime for the Hakataramea River, detailed in Table 3 line xix, applies only to the main stem of the river and not the tributaries; and
 - b) Both diversions and takes should be counted in the allocation regime, but not be double-counted.

NOTIFICATION AND SUBMISSIONS

13. The application was publicly notified on 21 March 2015, and then again on 2 April, due to an error in the first notification. The (corrected) notice was as follows:

Resource Management Act 1991

Applicant: Infinity Investments Limited

Address: C/- Environmental Associates Limited, PO Box 2079 South Dunedin

Attn: Tom Heller

Water Permit – CRC155773

This is re-notification of resource consent CRC155773 which was originally notified on 21st March 2015. This consent is being re-notified with a corrected rate of take.

Application to take and use water from the Hakataramea River via surface water abstraction point CA17/0002 and shallow bore I40/0004, at McHendrys Road, Hakataramea. It is proposed to take water at a combined rate not exceeding 68 litres per second and an annual volume not exceeding 1,602,387 cubic metres between 1 July and the following 30 June.

Water shall only be used for on-farm storage and spray irrigation of up to 560 hectares of crops and pasture.

The proposed take will be subject to minimum flow conditions at the Main Highway Recorder Site for the Hakataramea River as follows:

September – March: Reduce to 50% of consented take when flows are between 1,500 L/s and 500 L/s and cease take when flow is below 500 L/s; and

April – August: Reduce to 50% of consented take when flows are between 1,750 L/s and 750 L/s; and cease take when flow is below 750 L/s

A consent expiry date of 12 April 2038 is requested.

14. Fifty seven submissions were received, all in opposition. Many of these, including irrigation companies, and farmers and residents of the Hakataramea Valley, were represented at the hearing by Ms Steven and Ms Johnston. Issues raised by submitters included the effect on water quality and instream habitat, particularly for salmonids, effect on salmon spawning, reliability of supply for existing users, and over-allocation of both the Hakataramea and Lower Waitaki catchments.

PLANNING BACKGROUND

Overview

15. The WCWARP governs allocation of water within the Waitaki catchment. It was prepared and approved by the Waitaki Catchment Water Allocation Board ('the Board'). It contains rules relating to the taking and use of water. Neither the Natural Resources Regional Plan, nor the Land and Water Regional Plan are relevant in regard to allocation. They do apply in respect of water quality issues.

- 16. There are two types of allocation limit contained within the plan, which manage different things. The first is the environmental flow regime (EFR) set for each sub catchment, which sets an instantaneous allocation limit (500 l/s for the Hakataramea River) and a minimum flow at which abstraction must cease (also 500 l/s for the Hakataramea River). These are detailed in Table 3 of the plan. The second is the annual volume allocation to different activities, grouped into broad sub-catchments. These are detailed in Table 5.
- 17. The Table 3 EFRs were set considering a number of matters related to instream ecosystem functioning and use of the rivers, detailed in Policy 4 and (for the Hakataramea) Policy 43. Their purpose is to enable access to water for consumptive purposes, including irrigation, while sustaining the quality of the environment of the Waitaki River system, including life supporting capacity, mauri and domestic water needs. These matters are detailed in Objective 1.
- 18. The Table 5 annual allocations are to establish allocations for the various activities listed in Objective 2. Policy 12 details the matters that were considered when the allocations were set, and includes the significance of the hydro-electricity scheme within the catchment, the importance of irrigation, the relative environmental effects of the various activities, and giving a preference to needs for water within the catchment.
- 19. Non-compliance with either the EFR, or the annual allocation, leads to non-complying activity status.
- 20. Of note is that the annual allocation volume for agricultural and horticultural activities, in the part of the catchment in which the application is located ('downstream of Waitaki Dam, but upstream of Black Point') is currently allocated to about 200 Mm³/year. The allocation limit specified in the plan is 150 Mm³/yr.
- 21. During the Lower Waitaki consent process discussed above, it was clear that the applications being considered would significantly exceed the annual allocation, despite the clear intention of the plan to provide for further irrigation development within the catchment. The consents were granted, despite the annual allocation limit being exceeded. The decision discussed various reasons why the allocation limit might be insufficient, eventually concluding that it reflected a difference in the way the Board had determined the volume required for irrigation, and the way the existing allocation had later been calculated by ECan, particularly in respect of the way mining rights were counted. While granting all the applications despite the over-allocation, it did note that 'for the future this ruling should not be regarded as a precedent by anybody including pending or future applicants who are not before us'.

Plan Change 3

- 22. In June 2014, Plan Change 3 (PC3) to the WCWARP was notified. This is one of a number of plan changes that seek to address matters raised by the Waitaki zone committees and following an efficiency and effectiveness review of the WCWARP. Hearings have been held, but decisions have not yet been released.
- 23. One of the 'minor amendments' that PC3 addresses is the confusion over whether diversions should be counted as well as takes within the allocation regime, mentioned above as the subject of a ruling in the NTBC decision.
- 24. Rule 2(1) of the WCWARP currently states: "Except as provided for ... no person shall take, use, dam or divert surface water or groundwater unless: (b) the amount taken or diverted from the relevant river or stream is for a replacement consent or in combination with the amount of water authorised to be taken **or diverted** by existing resource consents, does not exceed the allocation limits in Table 3." [emphasis added]
- 25. Rule 6 is similarly worded in relation to calculating annual allocations. PC3 seeks to remove the bolded 'or diverted' from each rule, to clarify that only takes need be counted.
- 26. PC3 also seeks to increase the annual allocation in Table 5 for agricultural and horticultural activities in the catchment between Waitaki Dam and Black Point to 200 Mm³/s.
- 27. The effect of this for the current application is that under PC3 the activity would be within both the Rule 2 / Table 3 EFR allocation limit and the Rule 6 / Table 5 annual allocation limit.

Flow sharing regime and existing minimum flows

- 28. Historically, permits in the catchment were subject to a flow regime that had a minimum flow of 500 l/s, and a requirement to reduce the take by 50% at 1,500 l/s. At the Lower Waitaki hearings, this minimum flow was retained, despite differing from the flow sharing regime included in Table 3, which requires flow sharing between 1,000 l/s and 4,500 l/s. This was requested by the applicants, who considered the new flow regime to be more restrictive.
- 29. A graph was produced by Ms Johnston to demonstrate the difference in rate of take allowable under the two regimes during the September March period. This shows a flow sharing regime between 1,000 and 500 l/s for the plan EFR, however the EFR does not explicitly require this, allowing the full rate of take down to the minimum flow. In practice, takes are likely to be reduced as flows fall towards the minimum flow, to prevent full restrictions being imposed.

- 30. The result is that, in theory, at all flows below 1,500 l/s, the plan minimum flows are *less* restrictive than the consented minimum flow. In practice, below about 750 l/s there is probably little difference due to the voluntary reduction in take that most likely occurs.
- 31. The submitters highlighted that the EFR also requires flow sharing between 1,000 and 4,500 l/s. 'Flow sharing' is clarified in Rule 2(c) to mean that no more than half the available water can be taken or diverted. The 'A band' allocation provides for a maximum rate of take of 500 l/s. Above 1000 l/s, this full amount can be taken while still 'sharing' 500 l/s with the river. We understand that all other takes are 'B permits', subject to a minimum flow of 4,500 l/s. These will not affect flows between 4,500 and 1,000 l/s. As a consequence, no conditions are necessary on the applicant's take to comply with clause (c).
- 32. If we have interpreted this correctly, then the proposed conditions comply with the EFR for the period September to March.
- 33. In winter, a different regime applies: a minimum flow of 750 l/s, with flow sharing between 750 and 4,500 l/s. The applicant proposes to reduce the take by half at 1,500 l/s and cease taking at 750 l/s. In this case, at flows above 1,000 l/s, the proposed regime is more restrictive than the plan regime. However at flows between 750 l/s and 1,000 l/s, the plan regime is more restrictive. The proposed consent condition does not comply with the EFR in this respect. In practice, there may be little difference in the rate of take, if the applicant reduces the rate of take as flows fall towards the minimum flow. However there is no guarantee that this will occur.

Existing allocation in the Hakataramea River

- 34. It is important to determine the existing allocation status of the Hakataramea River, as this affects whether the application is in compliance with the allocation aspect of Rule 2 of the WCWARP. This issue is central to the applicant's case.
- 35. ECan's confirmed allocation inventory table, prepared in November 2014, was provided to us attached to the evidence of Ms Shaw. This inventory shows an allocation of 472 l/s, including an allocation of 150 l/s to Davenport Holdings Ltd, for a diversion of 150 l/s and a take of 110 l/s, an allocation of 110 l/s to J&M Clarke (now B&C Nowell) for a surface take, and an allocation of 25 l/s to Montara Properties Ltd for a groundwater take.
- 36. The Davenport and Nowell takes were the result of a partial transfer of a single take for 110 l/s. The volume authorised under the original permit was divided between the two properties, but both retained the right to take at a rate of 110 l/s. Mr Heller explained that the volume restriction on the Davenport take meant this take was equivalent to a take of 3.3 l/s if operated

continuously. It was intended as a water supply for a housing development, but had not been exercised for the past 10 years.

- 37. The Nowell consent is equivalent to a take of 25 l/s if operated continuously. Mr Nowell, who attended the hearing confirmed that this was the rate of take used. The original take and diversion consent were granted at the same time, and the take was presumably dependent on the diversion. Mr Nowell agreed it was likely to have originally been used for border dyke or flood irrigation.
- 38. The takes are from a diversion channel within the bed of the river, which has the appearance of a braid of the river. The current permits are not restricted to a particular take location, nor are they linked to the diversion permit, nor is there any limit on their concurrent use. It would be quite lawful for one or other to be operated from another part of the river, and not be restricted to the diversion channel, or rely on the diversion I nany way.
- 39. Ms Korevaar's report explains that since there is no limit on concurrent operation, both could be operated at once. An original allocation of 110 l/s has therefore, legally, become an allocation of 220 l/s. Inclusion of the diversion rate in the inventory for the Davenport take, rather than the take rate, derives from ECan's interpretation of the NTBC ruling that diversions should be counted, which states: "we hold that diversions for activities other than those expressly excluded are to be treated as being included for the purposes of Rule 2 and Rule 6 of the Allocation Plan"¹.
- 40. Ms Johnston agreed with this approach in her evidence.
- 41. The diversions 'expressly excluded' in the WCWARP are those that are returned to the same water body in the vicinity of the take or diversion point, in the same condition and quality as taken, for micro-hydro-electricity generation or fisheries and wildlife (Rule 2(3) and Rule 6(2)).
- 42. The NTBC ruling was made in the context of determining how much water Meridian Energy Limited (MEL) must provide for downstream irrigators if the NBTC consents are exercised, to ensure they retain 100% reliability in terms of water rate and volume. The conditions of consent detail this rate, and how it is calculated. It includes all takes and the 'greatest cumulative rate of additional surface water diversions from the main stem of the Waitaki River'.
- 43. In respect of diversions, it states that:
 - a) where a diversion includes a take, and the diverted water is returned to the river in close proximity of the take, the maximum rate of take is based on the take rate alone.
 - b) where a diversion does not include a take, the diversion rate has been used as the maximum rate.

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¹ p157 of the NTBC Interim Decision

- c) where water is diverted without a take, but never leaves the river margins, the diversion rate is not included.
- 44. These exclusions go beyond the exclusions in the WCWARP, by specifically recognising diversions 'that never leave the river margins'. We can find no discussion specifically of this clause in the decision, but presume the Panel recognised that these diversions do not remove water from a river, and so should not be counted within the allocation, despite its stated view that all diversions apart from those expressly excluded in the WCWARP should be counted.
- 45. We agree that where a diversion remains within the river bed, whether a take is associated with it or not, the diversion is not removing water from the river, and so logically should not contribute to the allocation.
- 46. In the case of the Nowell and Davenport diversion, the diversion channel remains within the riverbed. Ms Semple pointed out that the diversion 'does not include a take' as the permits are separate and not linked, and so would fall under clause (c). Water is removed by means of the two take permits. We think that whether the diversion 'includes a take' or not is less important than the fact that the diversion does not leave the river. It is effectively another braid of the river.
- 47. While the diversion and original take consent were granted as a package that was for a specific activity that no longer exists. The take consent is now two separate permits, for completely different purposes. There is no obligation for the consent holders to rely on the diversion.
- 48. In this case we do not think it is sensible to count the diversion rather than the takes and we do not think that this outcome is what was intended when the panel made the ruling in relation to the NTBC consent. (We recognise that the NTBC ruling did not apply to the Hakataramea, however the principle remains the same.) It is our view that the panel considered the diversions in relation to whether they result in the removal of water from the river. The exceptions listed above are an attempt to describe this, but they do not consider the full suite of diversion possibilities, possibly because no-one brought the particular situation that we are dealing with here to their attention. It may be that a similar arrangement does not exist in relation to the Lower Waitaki main stem diversions.
- 49. We note that during the Lower Waitaki consent process no ruling was made specifically in relation to the Hakataramea allocation, or the inclusions of diversions within it, as this was not necessary in the context of the applications being decided. We do not consider the interpretation we have made to be inconsistent with the NTBC ruling, however we note that it is made specifically in relation to the situation of these consents within the Hakataramea.

- 50. Following this interpretation, the two takes would be counted, and not the diversion (i.e. 110 + 110).
- 51. We note that when making the Lower Waitaki decisions that related to the Hakataramea, the advice given to the panel was the if all A permit applications were granted, the allocation would be 407 l/s². Ms Johnston advised at this hearing that those figures included an allowance of 110 + 110 for the Davenport and Nowell permits, which presumably reflected ECan's interpretation of the allocation of the time. We note that this was after the NTBC ruling on diversions. The figures appear to have been accepted by the panel at face value and are not discussed in detail in the decision.
- 52. We further note that this outcome is the same as would be achieved if PC3 is approved as notified.
- 53. Ms Semple argued that given the actual rates of take are considerably less than 110 l/s, to continue to allocate that amount to each permit would be fanciful, or absurd. While we agree that a rate of take anywhere close to 110 l/s appears highly unlikely for either consent, Ms Johnston pointed out that water could be taken at this rate for storage, as and when flows were available. That is theoretically possible, and so relying on the current net rate of take would not be correct. Both consent holders could legally take 110 l/s each, for a short period, and we have to assume that this may occur.
- 54. There are no doubt other examples of consents within the Waitaki where the paper allocation does not match the actual use, as farming operations become more efficient, and in particular resulting from the conversion of border dyke or flood irrigation to spray. Counting the net take rather than the consented rate would be inconsistent with practice elsewhere in the catchment and probably the region, and we do not consider it appropriate to do so.
- 55. We conclude that the existing A band allocation is 472 l/s.

Application Status

- 56. The take and use of water is a discretionary activity under Rule 15, provided it complies with Rules 2, 6 and 7. Activities that do not comply with any of these rules are a non-complying activity under Rule 16.
- 57. Given our findings above, the take and use is within the allocation limit in Table 3, row xix, clause (c). Also as discussed earlier, it complies with the provisions in clauses (a) to (d), but not clause (e), the winter flow sharing

 $^{^2}$ Lower Waitaki Hakataramea Valley applications decision – CRC050940, CRC050960 and CRC050957 G & ZL Pringle. Page 33.

- regime. The activity therefore does not fully comply with the EFR, and so does not comply with Rule 2.
- 58. The activity also does not comply with Rule 6, as the annual allocation for agricultural and horticultural activities is already exceeded.
- 59. As previously discussed, in respect of PC3, the activity would comply with the allocation limits under Rules 2 and 6, however it would still not comply with clause (e) of the EFR, and so would remain non-complying.
- 60. All parties agreed that the overall rule status is non-complying.
- 61. Water quality issues are not dealt with in the WCWARP, which refers to the Natural Resources Regional Plan (NRRP). This contains no relevant rules. The NRRP is being replaced by the Land and Water Regional plan (LWRP) We note that all parts of the LWRP became operative on 1 September 2015, apart from a limited number of rules relating to taking and damming of water. At the same time, Chapter 4 of the NRRP, which deals with water quality, was revoked. The LWRP classifies the catchment as an orange nutrient allocation zone. Rule 5.53 permits the use of land for a farming activity, provided the nitrogen loss does not exceed 20 kg/ha/yr. The applicant has proposed conditions to this effect. No consent is therefore required for the use of land for farming and the associated nutrient discharge.

Weighting to PC3

62. PC3 is at an early stage in the planning process, and so relatively little weight should be given to it. There appear to be no submissions fully opposing the removal of diversions from the allocation regime or the increase to annual allocation, but clarifications and other changes are sought. There are also submissions rejecting PC3 in its entirety. For these reasons, we give it little weight in making our decision, but do note for completeness where our decision is consistent with it.

RECEIVING ENVIRONMENT AND SITE VISIT

- 63. The local environment is described in the AEE, s42A report and WCWARP, and so is only described briefly here. The Hakataramea Valley is dry, particularly on the eastern side, with an average annual rainfall at the valley floor of 450 mm. Irrigation is widely undertaken to sustain pasture growth.
- 64. The Hakataramea River has a mean flow of 5.7 m³/s, and a mean annual 7-day low flow of 960 l/s. It is fed by a number of tributaries, many of which go subsurface at times prior to reaching the main stem. The river itself goes dry in its middle reaches, at about Wright's Crossing, at flows of about 1,000 l/s.

- 65. The river maintains a significant trout fishery, and is a significant salmon spawning site.
- 66. There are a large number of permits to take water for irrigation within the catchment. These include both 'A' permits, which are subject to the 500 I/s minimum flow, measured at the Main Highway recorder site, and water harvesting takes, which generally cease taking at flows of 4,500 I/s. Takes from the tributaries are not counted within the allocation limit, which applies only to the main stem (see above). There is approximately 877 I/s allocated from the tributaries as A permits. While takes from the tributaries are not required by the WCWARP to cease at the Hakataramea River minimum flow, as they are subject to a different regime, consents have generally been granted that are subject to the same minimum flow regime; that is, ceasing taking at a flow of 500 I/s at Main Highway bridge.
- 67. We visited the river in the vicinity of the abstraction site on 2 August, travelling up McHendrys Road as far as Wrights Crossing. The flow at the time was 1,950 l/s at Main Highway.
- 68. We were later provided with an aerial photograph showing the location and nature of the diversion channel feeding the Nowell and Davenport takes.

SECTION 104 ASSESSMENT

- 69. Section 104(1) requires that, subject to Part II of the Act, regard must be had to:
 - (a) any actual or potential effects on the environment of allowing the activity; and
 - (b) any relevant provisions of
 - (i) a national policy statement
 - (ii) a New Zealand Coastal Policy Statement;
 - (iii) a regional policy statement or proposed regional policy statement;
 - (iv) a plan or proposed plan; and
 - (c) any other matter the consent authority considers relevant or reasonably necessary to determine the application.
- 70. The principal issues in contention were:
 - a) Effects on water quality and periphyton growth
 - b) Effect on instream ecosystems, in particular salmonid habitat and salmonid spawning
 - c) Effects on reliability of supply of existing users
 - d) Over-allocation in terms of Rule 6, Table 5 of the WCWARP

e) Technical and allocative efficiency, particularly in light of other consents held by the applicant

The role of the EFR on consideration of effects

- 71. This issue was a key component of both applicant and submitter's cases and effects our conclusions, and so we will discuss it first. Ms Steven discussed at some length the relevance of the environmental flow regime in assessing effects. Could a conclusion be reached that if the application was in accordance with the flow regime, then the effects on matters which the EFR was intended to protect, were 'anticipated and acceptable', as promoted by witnesses for the applicant, and accepted in the s42A report, such that no further consideration was necessary?
- 72. All parties agreed that as a non-complying activity, there was discretion to consider all effects. Ms Steven contended that relying on compliance with the EFR to determine that effects were acceptable was akin to using it as a permitted baseline, and this was clearly not appropriate as the activity was at best discretionary, not permitted. There is no basis in case law that the starting presumption is in favour of granting a discretionary activity. Ms Steven argued that under s104(1)(a) the test of whether effects are acceptable must be made case-by-case, considering the sensitivity of the receiving environment.
- 73. Ms Semple stated that the applicant was not arguing that if the take was within the allocation limit it must automatically be granted. She agreed that the effects of all applications must be assessed and determined. However, she considered that we are entitled to rely on the flow regime set by the Board, based upon the full suite of evidence the Board heard and considered. The EFR and the annual allocations form the basis of the plan. In her words "To undermine these consent by consent makes a mockery of the plan³". In her view, it is not open to us to change the plan through the consent process. There is insufficient evidence to introduce a lower allocation limit or higher minimum flow, and even if there was evidence, that course is not open to us.
- 74. She also pointed out the inconsistency in arguments raised by submitters, firstly that an application within the allocation limit was given no particular advantage, and all effects still required careful analysis and no expectation that consent should be granted, and secondly that if the application is above the allocation limit it is immediately inconsistent with the objectives and policies of the plan. In her view, the latter argument suggests that the allocation framework is set at an appropriate level to ensure the values of the catchment are sustained.

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³ Paragraph 37, Closing submissions

75. In paragraph 76 of the WCWARP Decision and principal reasons report, the Board discusses the role of the EFR and annual allocations:

"The environmental level and flow regimes, and the allocations to activities, are two key components of the allocation framework established by this plan. They should be binding except in specific circumstances where it can be established that the adverse environmental effects of the proposal are minor, and where the activity is not contrary to the objectives and policies of the Plan."

- 76. It is clear from reading the decision and s32 report that the Board intended that the EFR provide certainty to users seeking to take water. Despite the fully discretionary status, the Board intended that the EFR set a clear line as to what is to be considered acceptable, and what needs a far closer scrutiny to determine whether effects are minor.
- 77. The Panel considering the Lower Waitaki consents took the same approach. For example, in the Hakataramea decision⁴, it states:

"We comment here that this appears to be attack on the relevant provisions of the Allocation Plan which provide for a minimum flow in the Hakataramea of 500 l/s and an A allocation block of 500 l/s. We must of course take the Plan as we find it. It is not for us in these proceeding to seek to change that regime."

78. And on page 26:

"While reservations about the effectiveness of the Allocation Plan's minimum flows were expressed by Mr Hughes, we are satisfied that this issue was sufficiently explored in the Allocation Board's enquiry, and indeed this hearing, and there is no need to further assess the issue of flow requirements for instream habitat and fish passage particularly in respect of the main-stem river."

79. Policies 4 and 43 detail the matters that were considered when the Hakataramea EFR was set. These include a comprehensive list of matters relating to the instream ecosystem. Policies 3 and 43 state that the EFRs are set to enable access to the water for irrigation (and other uses) to the extent consistent with Objective 1. Objective 1 is to sustain the qualities of the environment of the Waitaki catchment. The EFRs were therefore clearly set having considered the particular matters within the catchment that needed to be recognised and protected to ensure Objective 1 is achieved. In our view, the Board intended that if the EFR was complied with, Objective 1 would be achieved in respect of the matters that it addresses. In other words, the effects could be considered to be 'anticipated and acceptable'.

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⁴ Lower Waitaki Hakataramea Valley applications decision, page 17

- 80. This is supported by the explanation to Policy 4, which states: "Policies 4 and 5 identify the matters that should be considered when setting environmental flow and levels regimes and these should be addressed when considering any application for a resource consent that is a non-complying activity in respect of the environmental flow and level regimes established in this Plan."
- 81. This view is further supported by Rule 15, which details a list of policies to which regard must be had when considering a discretionary activity that complies with the EFR and annual allocation rules. These policies address a number of matters, including the requirement that activities comply with the EFR. They do not address any other matters in regard to effects on instream ecosystems. We accept that Rule 15 does not provide an exhaustive list, being phrased as "... will have regard, among other matters to ...", however it is provides clear guidance to applicants and ECan as to the relevant matters to consider.
- 82. Our view is that the EFR provides clear direction as to what Plan considers to be an acceptable effect in respect of the matters addressed by the EFR. In relation to those matters, compliance with the EFR achieves Objective 1. It is not our job to create a new *de facto* EFR through the consent process. Any shortcomings of the plan in that respect must be addressed by a plan change.
- 83. However, there is an issue with the Hakataramea EFR, in that it only applies to takes from the main stem, not to takes from the tributaries. The minimum flow and flow sharing regime (if applied to takes from the tributaries) will protect certain instream values, but takes from the tributaries are not subject to an allocation limit. Consequently, over 800 l/s of takes have been granted. These takes have the potential, cumulatively with takes from the main stem, to hold flows in the river lower, and for longer periods of time, than would otherwise occur, potentially resulting in effects on instream values.
- 84. This raises the question about how to treat compliance with the EFR in this case. We could decide that compliance with the EFR results in 'anticipated and acceptable' effects, as discussed above, or we could look more holistically at the catchment and consider the cumulative effect of takes that are not subject to the EFR allocation limit.
- 85. In catchments where the EFR applies to all takes, then we agree with the applicant that it is appropriate to rely on the EFR. However in this situation we do not think it is correct to ignore the effects of the takes from the tributaries. It is proper to examine the cumulative environmental effects of takes from the tributaries that are not subject to the EFR allocation limit. This is reflected in Policy 1 of the WCWARP, which is to recognise the importance of connectedness of all parts of the catchment.

86. We also note that where there is non-compliance with the EFR, or in relation to matters which are not addressed by the EFR, then there is of course no presumption that effects are acceptable. This applies particularly to salmon spawning, which occurs in the winter months when the EFR is not complied with, and to effects on reliability of supply, which is a matter that Rule 15 specifically requires that regard is had to, through Policy 26. The effects of these must be determined on the evidence before us.

Effects on water quality and periphyton growth

- 87. The discharge of nutrients in this case is a permitted activity, so we cannot consider the direct effects of any discharge on water quality. However the take will reduce flows in the river and the effect of this reduction in dilution was raised by submitters, in particular Mr Sutton, in respect of the effect on existing irrigators who are required to monitor water quality, and may be required to reduce their own discharges if instream nutrient concentrations rise.
- 88. The applicant has agreed to the same water quality monitoring conditions that apply to other abstractors within the catchment.
- 89. The applicant's case was that the water can be abstracted without affecting instream values or causing other effects in a more than minor way. Dr Donovan's evidence focussed on data obtained up to and including 2008. He stated that the river was in a mesotrophic state (mildly nutrient-enriched). Dr Donovan also commented that the Brother and Foveran properties use land and riparian management methods to maintain or enhance water quality, for example nutrient budgeting. His view was that given that the proposed conditions in relation to nutrient management are the same as those on the Brothers consent, the effect of the proposed take on water quality will be no more than minor.
- 90. More up-to-date water quality data was provided to us from the Hakataramea irrigation consents water quality monitoring programme, which is a monitoring programme required by the condition of the Hakataramea consents granted at the Lower Waitaki hearing. A baseline monitoring report was produced in 2012, and one subsequent monitoring report has been prepared, for the 2013-2014 season⁵. In addition, we were provided with a draft report⁶ prepared by ECan summarising the state and trend of water quality and ecology in the Lower Waitaki catchment. Of most interest is data from the Main Highway site at SH82, being downstream of the application site and at the bottom of the catchment, therefore a site that will reflect land use within the whole catchment.

⁶ Clarke, Graeme. Lower Waitaki catchment water quality and ecology: state and trend. Draft report 2015.

⁵ Christensen, Jack, 2014. Water Quality summary report June 2013 - June 2014. For Hakataramea River Consent holders.

- 91. Considering all these data sources, water quality in the Hakataramea River currently appears to be good. The most recent data (2013/2014) from the Hakataramea consents water quality report shows an average DIN of 0.185 mg/L. The average DRP is recorded as 0.062mg/L in the Hakataramea water quality report, however this appears to be an error, as the maximum recorded in both the Hakataramea consents report and the ECan report is 0.009 mg/L. The correct figure is assumed to be 0.0062 mg/L. Both figures for DIN and DRP are well within ANZECC guideline values.
- 92. Of interest, the ECan report shows a trend in increasing dissolved inorganic nitrogen of 20% per year and DRP of 7% per year between 2004 and 2013. These are described as 'environmentally meaningful', however as stated above, nutrient levels remain good. Macroinvertebrate community index data (an indicator of water quality) show the community at SH82 to be in the 'excellent' range for QMCI⁷, with the percentage of EPT taxa (a metric which measures pollution sensitive invertebrates) in the 'moderate' range.
- 93. Periphyton growth is monitored weekly throughout summer at SH82. The ECan report states that growth met LWRP objectives in terms of % cover between 2009/10 and 2013/14 (the last year for which data are available). However there was a change in 2013/14 from a dominant filamentous algal cover to benthic cyanobacteria. The reasons are not known, but the report postulates it may be due to increasing DIN concentrations, higher than average water temperatures, and/or a longer accrual time (i.e. the time between freshes). Levels of cyanobacteria exceeded Ministry of Health guidelines in 2013/2014 and warning signs were posted.
- 94. The additional dilution that might result from this application at river flows below 1,500 l/s is 34 l/s (50% of the take of 68 l/s). At flows of 1,500 l/s this would likely provide minimal benefit. At flows close to 500 l/s there may be some benefit. Ideally there should be limited reliance on dilution to avoid adverse effects, and the focus of managing nutrient loss and the consequent effects should be at the farm. However we acknowledge that some loss of some nutrient to surface water is inevitable.
- 95. We note in the Lower Waitaki South Coastal Canterbury ZIP addendum that the Zone Committee has recommended an allowance of a 4% increase in the catchment nutrient load limit over the current consented amount. Presumably this indicates that additional discharge is acceptable while still retaining water quality at an acceptable level.
- 96. We have some concern about the increase in nutrient concentrations over the last few years, and the role this may have played in the increase in cyanobacteria growths. The increase will presumably continue as consented

Quantitative macroinvertebrate community index

irrigation is developed. However we heard no technical evidence that current nutrient levels, or those predicted on the basis of consents already granted, will cause detrimental effects on instream ecology. We also note the Zone Committee's recommended increase in acceptable discharge into the catchment. We conclude therefore that reduced dilution from this consent is unlikely to have a more than minor effect on the instream environment or existing irrigators.

Effect on instream ecology

Trout habitat and water temperature

- 97. Dr Donovan described the river as a significant ecological resource in the lower Waitaki catchment, which provides a habitat for a number of species of fish and birds, some of which are nationally threatened. His evidence in relation to the effects on ecological values of the river relied heavily on compliance with the EFR. His view was that since the abstraction regime complied with the plan EFR, which was set to protect the ecosystem of the river, the impact of the abstraction on the ecology of the Hakataramea would be minor.
- 98. Ms Christensen, Mr Webb and Mr Baker summarised the importance of the Hakataramea as a trout fishery and salmon spawning ground. The river supports four species of salmonid: brook char, brown and rainbow trout and chinook salmon, possibly the only river in New Zealand with such an assemblage. Schedule 17 of the proposed LWRP classes the river from the confluence with the Waitaki River to Cattle Creek as a significant spawning site. The river sustains 1,600 to 1,900 days of angling effort per season, primarily in November and December. Ms Christensen described the river as a regionally significant trout and salmon fishery.
- 99. Mr Webb explained that trout spawn in the Hakataramea in winter, between July to September. This provides fish for the Waitaki River fishery, which is totally dependent on tributary spawning. It is the rainbow trout fishery, in the upper reaches of the Hakataramea, for which the river is renowned. This fishery is dependent on winter access for adult trout, and spring and summer access for their offspring moving downstream to the Waitaki. Several submitters were concerned about the health of the fishery, which they consider is affected by over-abstraction, causing low flows, high temperatures and reduced oxygen levels.
- 100. Ms Christensen explained that summer water temperatures in the Hakataramea were of concern in relation to trout habitat. Above a temperature of 19°c brown trout cease feeding, behavioural disturbances occur for rainbow trout, and the growth of chinook salmon declines significantly. Angling success declines above 19°c to 'unsatisfactory' levels.

- Ms Christensen cited a Cawthron Institute recommendation that regionally significant fisheries should be maintained below 19°c.
- 101. Ms Christensen presented data showing the water temperature over three recent summers at the Mt Florence recorder, approximately 12 km upstream of the proposed take. Data is not available prior to 2011. We were later provided with more detailed data for two of these periods, overlaid with flow data from both Mt Florence and Main Highway. Flows at Mt Florence are slightly lower than at Main Highway, but follow a similar pattern.
- 102. In all summers, the maximum temperatures exceeded 19°c over a period of several weeks. Night time temperatures dropped below 19°, the daily fluctuation being in the range of 5°. There were occasional exceedances above 23°c for periods of up to several hours. Ms Christensen explained that this is a lethal temperature if exceeded for several days, however population deterioration can occur within hours.
- 103. Ms Christensen's view was that abstraction caused, or contributed to, reduced water depths and elevated temperatures. She sought no further abstraction on the grounds this would further exacerbate low summer flows and higher temperatures.
- 104. On reviewing Ms Christensen's evidence, Dr Donovan agreed that water temperatures in the river are a cause for concern, as temperatures are high when flows are above the minimum. The temperature data suggested there was reason to doubt that the EFR was sustaining a healthy fishery. However he did not concur with the suggestion that this application would cause additional effects.
- 105. The flow and temperature data show there is a relationship between low flows in the summer months and higher temperatures. It is not the only factor; temperatures are higher during the warmer months regardless of flow, and the highest temperatures do not match the lowest flows.
- 106. The effect of abstraction on summer flows is managed through the EFR, and in relation to takes from the main stem, the EFR has been set to achieve Objective 1. However as discussed earlier, we think it necessary to look at the effects in relation to the takes from the Hakataramea catchment as a whole. The existing abstraction from the tributaries has the potential to hold flows at lower levels, and for longer periods, than would occur with just the main stem takes. We are concerned about the temperatures recorded in the river and consider it is likely that all takes from the catchment, cumulatively, are contributing to these. There was agreement from Dr Donovan that there is cause for concern. The temperatures are higher than those recommended for a regional significant trout fishery. Any additional take, when considered against this receiving environment, has the potential to exacerbate this situation.

107. In light of the significance of the trout fishery we consider that, cumulatively with existing takes in the catchment, the effect of the abstraction on instream habitat for salmonids will be more than minor.

Salmon spawning

- 108. The Hakataramea River is a significant site for salmon spawning. Fish and Game, the Waimate Rod and Gun Club and Mr Baker all raised concerns in relation to the effect on abstraction on salmon spawning. Dr Donovan did not address the effects on salmon spawning specifically, but relied on the EFR to protect the ecological values of the river in general.
- 109. Mr Webb explained that salmon 'hole up' near the Hakataramea mouth until March, then venture into the river. Spawning occurs from mid-April to mid-June, peaking at the end of May. 90% of redds occur below Wrights Crossing.
- 110. The Waitaki Dam has made the tributaries of the Lower Waitaki River important for spawning, as salmon cannot reach the headwaters further up the catchment. During surveys between 1976 and 1986, an average of 12% of salmon spawning in the Waitaki catchment occurred in the Hakataramea and salmon numbers in the Hakataramea were used as an index of numbers within the Waitaki itself.
- 111. Mr Webb indicated that salmon spawning in the Hakataramea has reduced markedly from levels of 20 years ago. Spawning in East coast rivers has declined generally by about one third, but the decline in the Hakataramea has been 10 to 20 times greater. Aerial spawning survey data from 1993 show numbers of spawning salmon between 1993 and 1997 of 1200 to 6500, then a decline to less than ~ 300 since 2000.
- 112. Mr Webb analysed the incidence of low flows during March and April. Looking at five periods of low mean flow in March and April between 1976 and 2008, he showed that there is a higher incidence of flows below 800 l/s in the two periods since 2001. Periods of flow below 800 l/s in March and April have increased from no more than 10% of the time in the 1970s and 1980s, to regular occurrences of about 50% of March and April, during the 2000s. Low flow years were also recorded in 2010 and 2015. In low flow years since 2000 spawning was low, fewer than 172 fish per year.
- 113. Mr Webb also presented irrigation season flow duration curves for a number of periods from 1967 that had consecutive mean annual flows below the average mean flow. In these lower flow periods, the proportion of days below any given flow has generally increased across time. That is, in more recent periods, flows are lower for longer. Mr Webb considered that this reflects increasing irrigation in the catchment. Mr Webb stated there has been no long term decline in September to April rainfall over this period.

- 114. The correlation between lower flows and lower spawning runs is not completely clear, however we accept there has been a dramatic decline in salmon spawning over the past 20 years. We also accept that periods of low flow have been more pronounced in recent years and we agree that abstraction has increased during this time, which will undoubtedly have increased the time the river is held lower than its natural flow. We do not doubt that lower flows will hinder fish passage, and the effects of a poor spawning season one year will carry forward to future years.
- 115. The minimum flow is set in the WCWARP at 750 l/s during the April to August period, with flow sharing above this rate, specifically to cater for salmon spawning. Ms Semple highlighted in her closing comments that in formulating the EFR the Board specifically considered salmon passage for spawning. The Decisions and Principal Reasons report also clarifies that flow sharing below the mean flow was set in the EFR of rivers that are important spawning tributaries (including the Hakataramea)⁸.
- 116. However, the winter flow regime proposed by the applicant does not fully comply with the plan flow sharing regime. In addition, additional takes from the tributaries, which can help hold the river at lower levels, are not managed by the main stem EFR. We have concerns about the current state of salmon spawning within the river, which we agree has suffered a significant decline. We consider that existing allocation has contributed to this decline. Based on the evidence we heard, which was not contested by the applicant's ecological expert, we are of the view that further reduction in flow has the potential to exacerbate the situation.
- 117. Again, in the context of the importance of this river for salmon spawning, we consider the effect of the abstraction on salmon spawning, cumulatively with other takes, to be more than minor.

Effects on reliability of supply

- 118. Rule 15 specifically requires that in considering an activity that complies with Rules 2 and 6, regard is had to Policy 26 (among others).
- 119. Policy 26 aims to provide a measure of certainty as to the likely frequency of restrictions to consent holders through setting 'priority bands'. The first priority band is to be set to provide a stated reliability. If the existing reliability is less than the stated level (as all parties agreed it was in the Hakataramea River), then the existing reliability must be maintained.
- 120. There was some discussion as to how this policy should be interpreted. It was agreed by all parties that in the Hakataramea there are currently two priority

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⁸ Paragraph 111, Decision and Principal Reasons

bands: the A band, which includes consents subject to the 500 I/s minimum flow and within the 500 I/s allocation, and a B band, which provides for taking water for storage at high flows, generally at flows greater than 4,500 I/s. This application seeks to be part of the A band.

- 121. It is not immediately clear whether the policy refers to the setting of bands by means of the EFR (i.e. the A and B band for the Hakataramea), and the reliability of supply for each band is determined through that process; or if it is intended that priority bands be set through the consent process for abstractions that are within the allocation limits. Ms Johnston considered that Policy 26 allowed for setting additional reliability bands within the 'A band'. Ms Steven advised that a similar situation had occurred on a Lower Waitaki River consent.
- 122. If the former is correct, then the A band of 500 l/s was presumably set to achieve a particular reliability of supply when fully allocated, and this will be 'maintained' for abstractions up to that allocation limit. Consents granted above this limit must then maintain reliability of supply for A band users. If the latter, then we must consider the effects on the reliability for existing users through this consent process, even when within the EFR A band allocation.

123. The explanation to Policy 26 states:

"Policy 26 is adapted from the Natural Resources Regional Plan (Policy 14(4)), and recognises that as further consents to take, use or divert water are issued the run-of-the-river reliability to each user reduces. The priority bands provide enhanced planning certainty for water users who take or divert water on a run-of-river basis by limiting their exposure to the incremental erosion of their reliability of access to water in times of low flow. The policy is about managing between users, and not about the reliability to be provided as a result of setting an environmental flow regime.

Within a priority band restrictions apply equally to all users, rather than the use of a last-on, first-off restriction regime. ... Users in subsequent bands must cease taking before restrictions are applied to the higher priority band.

In many sub-catchments of the Waitaki, the existing reliability is below the level set in Policy 26a. For these catchments, the policy recommends that a priority band is set **that is equivalent to the existing peak allocation** or to the size of the first priority band if such an approach has been used previously. The specific priority bands can be established by the Canterbury Regional council in each instance in accordance with this policy." [emphasis added]

124. This last paragraph in particular suggests to us that it is intended that new users within the allocation limit set in Table 2 should maintain the reliability of supply for existing users ('the existing peak allocation'), and a banding

- system is intended to be the mechanism by which that is achieved. The current A and B band interpretation has been made by users it is not detailed within the plan itself.
- 125. Three independent models of reliability of daily supply of irrigation water (by Mr Heller and Mr Horrell on behalf of the applicant, and Beca on behalf of ECan) were prepared. Each used a different technique to determine the number of extra days of restriction for existing users. The Beca model used 32 years of record and the other two 8 years. Each of these models suggested that the additional number of days of restricted water supply on average would be small, from 1.5 to 4 days per year.
- 126. Mr Horrell considered that his model would over-estimate the number of additional days of restriction, as no attempt was made to model voluntary reductions in abstraction to maintain flows in the river, a practice which was generally agreed occurred. He considered the Beca model may marginally under-estimate the number of days, due to assumptions being made about how much water was used in the past. These assumptions are likely to overestimate actual usage. Mr Horrell concluded the likely number of extra days of restriction per year was in the order of 2 to 3 days, on average. Both Mr Horrell and Mr Giddens considered this a minor effect.
- 127. Mr Sutton explained that the river rarely goes below 500 l/s, but stays for extended periods below 550 l/s. 50% restrictions are therefore in place for a large portion of the irrigation season. (We note from Mr Horrell's evidence it is an average of 89 days between 1 September and 30 April, in the years from 2007/08 to 2014/15). Mr Sutton stated that having 100% restrictions every year would be unacceptable in terms of managing cropping activities. Water is required to finish crops in January.
- 128. Ms Soal explained that reliability of supply is of critical importance, as it allows more efficient use of water, provides certainty for investment and contributes to the social and economic wellbeing of the local community. We agree with all these points.
- 129. Considering the Beca modelling and Mr Horrell's modelling, which are at either end of the estimates of effect on restrictions, the Beca modelling shows that there would be an average of less than one day extra below the minimum flow, from a range of 0 to 4 days. The increase in total number of days on full or partial restriction is an average of 1 per year, from a range of 0 to 5.
- 130. Looking at Mr Horrell's data, there would be an average of 5 extra days below the minimum flow per year, from a range of 0 to 18. The increase in total number of days on full or partial restriction is an average of 4.5 days per year, from a range of 1 to 9.

- 131. Ms Johnston's view was that while such an increase may be of little effect in a catchment where there are relatively few days of restriction, in this catchment there are restrictions in place on average somewhere between 71 and 89 days per year. Ms Soal assessed the seasonal reliability as 71% 'poor or very poor'. Any decrease in reliability is unacceptable.
- 132. With this in mind we agree that the predicted increase, particularly considering a potential increase of up to 18 days in one year, is unacceptable. We agree that the effect on other users' reliability of supply is more than minor. Policy 26 would require, in this situation, to establish a banded approach, whereby the proposed take ceases prior to others in the catchment reducing their take. That is ceasing abstraction at a flow of 1,500 l/s, when other A permits holders in the river, and wider catchment, have to reduce their take by half.

Over-allocation in relation to Rule 6, Table 5

- 133. It is common ground that the annual allocation for the part of the Waitaki catchment below the Waitaki Dam but upstream of Black Point, for agricultural and horticultural activities, is over-allocated. Table 5 provides for an allocation of 150 million m³/year (Mm³/yr). The current allocation is in the order of 200 Mm³/year. The applicant proposes to take an annual volume of 1.6 Mm³/year.
- 134. Conditions are proposed such that the annual volume taken under both this application and the Brothers consent will not exceed the annual volume granted under the Brothers consent. The applicant's view is that no more water is being allocated: the allocation has already been assessed and authorised by ECan.
- 135. Ms Korevaar's view, on questioning, was that the catchment was overallocated in terms of Table 5, and this was not acceptable.
- 136. Of note is PC3, which proposes to increase the annual allocation to 200 Mm³/yr, and remove diversions from the accounting, which means that the current allocation would decrease to approximately 150 Mm³/yr. This change addresses an anomaly in Table 5. As discussed earlier, the Board intended to provide sufficient annual allocation for irrigation of irrigable land, however the volume required, and the volume allocated, do not match. If PC3 is approved as notified, this application will be within the annual allocation limit.
- 137. Ms Soal considered the application to have an adverse effect on abstractors within this part of the catchment on the grounds that the NPS Freshwater requires any over-allocation to be reduced, and so when existing consents are renewed, any additional allocation granted to the applicant may mean they

may have to reduce their volume of take more than they otherwise would have.

- 138. Ms Soal was also of the view that it would be premature to grant a consent which would effectively affirm the current over-allocation (or part of it) prior to the decision on PC3 being released. Members of the Waitaki Independent Irrigators Incorporated Society (a shareholder of WIC) have deferred applying for water from this allocation zone due to the effects on existing consent holders, and the desire to maintain some level of integrity between the plan and the consented landscape.
- 139. Ms Steven argued that as the Brothers consent has not been implemented, it is for us to decide whether it is likely to be. If it is, it cannot form part of the permitted baseline (this is limited to permitted activities), but would form part of the receiving environment. She referred to the process of 'incrementalism', whereby a developer might apply for successively more intense resource consents, relying on the consents previously granted to establish a baseline argument.
- 140. Ms Steven considered that the Brothers consent was a 'relatively benign' consent, in terms of effects on flows. We understand her argument to be that the benefits of that application (a take at higher flows) were not apparent in this application. That is, the Brothers consent has obtained a 'foot in the door' in terms of being granted annual allocation on the basis of its positive benefits as a water harvesting consent, and to rely on the annual allocation for this consent, which does not have those benefits, would be wrong.
- 141. As far as it is possible for us to predict what might happen with the Brothers consent, this application, along with the two other existing 26 l/s takes will not provide sufficient water for the full irrigable area. We would expect therefore that the Brothers consent would be likely to be exercised to some extent, but possibly to a smaller scale.
- 142. The reasons for granting the consent in exceedance of the plan annual allocation limits are not fully explained in the Brothers consent decision. If there was a clear connection between the benefits of water harvesting outweighing any adverse effects of granting additional allocation, we would need to consider this. However, there is no such link.
- 143. We agree with the reasoning made by the Lower Waitaki Panel in relation to the annual allocation limits in respect of the applications it was dealing with. While it states that their ruling should not be seen as a precedent, the rationale in relation to this application is no different. The Board intended to provide for future development of irrigable land. This application relates to irrigable land within the catchment. In that sense, we see no disconnect between the intent of the plan and the granting of annual allocation for this

application. The critical matter, however, is that the allocation has already been made. This consent and the Brothers consent together will be exercised up to that allocation. No additional water is sought. This application does not increase the over-allocation.

- 144. Ms Johnston stated that persisting with this allocation is not consistent with the National Policy Statement for Freshwater Management (NPS) because it does nothing to phase out existing over-allocation. However, not granting this consent would also do nothing to phase out over-allocation, since the allocation has already been made through the Brothers consent. The potential effect on the future replacement of existing permits has already occurred.
- 145. We accept that the allocation limit changes proposed by PC3 may not succeed. As with the other aspects of PC3, we are not relying on these in making this decision. We acknowledge Ms Soal's concerns, and the actions of other irrigators not to seek further allocation at this time, however the applicant is not bound by those actions and is able to apply and have a decision made on the merits of its own application.
- 146. In summary we consider there is no additional allocation. Even if there was, we consider that the intent of the plan is still met.

Efficient use of water

- 147. The efficiency of water application, that is ensuring it is applied at an appropriate rate and that only the amount needed is allocated to the applicant, is relevant. Over-allocation is an inefficient use of water.
- 148. There seemed to be no dispute that the use of water was technically efficient. That is, water would be applied at an appropriate rate and volume for the soil and conditions. The conditions proposed in this respect are the same as those on the Brothers consent. On that permit, there is a limit of 1,500 m³ per hectare per 30 consecutive days in conjunction with the other irrigation permits on the property.
- 149. Ms Korevaar assessed the proposed rate of take and annual volume as a reasonable and efficient use of water for the 560 hectares to be irrigated. Ms Johnston disputed it was allocatively efficient, as the applicant is already able to abstract all the water required for the 560 ha of land under its existing permits.
- 150. The application explains that this application increases the flexibility offered to the applicant by providing for more water to be taken as run-of-the-river. Ms Steven's argument was that if we are satisfied the Brothers consent will be given effect to, then we must consider the cumulative effects of all the consents. We have no reason to believe that the Brothers consent will not be

- exercised, as it is required to irrigate the full area of land. However, there are no cumulative effects of exercising them both, as they are jointly limited by an annual allocation appropriate for the area of land.
- 151. Even if we were to consider that the Brothers consent would not be exercised, and this proposal effectively replaces that one, then we would still consider that granting the additional annual allocation is appropriate, given the history of the allocation limits, as discussed earlier.
- 152. In conclusion, we consider that the allocation and use of water is reasonable and efficient.

Effect on tangata whenua values

- 153. The Hakataramea River is a statutory acknowledgement site and a mahinga kai. Both Te Rūnanga o Ngāi Tahu and Waihao rūnanga were advised of the application, however did not make submissions. In Mr Gidden's view this indicates a lack of concern about the proposed activity, and he concluded that effects on tangata whenua values would be no more than minor.
- 154. We have not been made aware of any wāhi tapu within the catchment. There is currently no iwi management plan specifically for the Waitaki catchment. Ms Korevaar assessed the application against Te Whakatau Kaupapa and concluded that it is in keeping with the policies relating to water.
- 155. The Ngai Tahu Freshwater Policy Statement is also a relevant iwi management plan. This identifies the need to protect mauri, protecting traditional cultural values and uses, and protecting other instream values. We heard no evidence on cultural values and uses, the mauri of the river, or the effect of the flow regime and current abstractions on mahinga kai species. We are unable to conclude the extent of effects on iwi values.

Section 104(1)(b) - Policy Statements and Plans

WCWARP

156. As discussed above, the focus of the plan is the allocation of water. The two critical objectives in our view are Objective 1 and Objective 2. Objective 1 is to protect the qualities of the environment of the Waitaki River (including through consideration of the importance of mauri, the interconnected nature of the river, the life supporting capacity, landscape and amenity values, the braided river system, and providing for domestic, stock and fire-fighting needs). Objective 2 is, to the extent consistent with Objective 1, to enable people to provide for their social, economic and cultural wellbeing and health and safety, by providing for water for various activities.

- 157. These objectives are primarily achieved through the EFRs and the annual allocation in Table 5. The application complies with the Hakataramea River EFR in all respects apart from flow sharing in winter, and makes use of an existing annual allocation, so does not result in further over-allocation. However, the EFR for the Hakataramea does not apply to takes from the tributaries, and so on its own does not achieve Objective 1 in respect of the Hakataramea River. Given the evidence we have heard about the instream values, we are not confident that Objective 1 is currently being met.
- 158. There are also a number of other policies relevant to this application. These are as follows:
 - Policy 1 to recognise the importance of the connectedness of all parts of the catchment. This is particularly relevant in respect of considering the cumulative effect of takes from the tributaries.
 - Policy 8 to promote water harvesting. This application will likely reduce the amount of water harvested under the Brothers consent.
 - Policy 13 when considering consent applications for agricultural and horticultural activities, have regard to the extent to which water quality objectives of the NRRP might not be achieved. Water quality has been discussed above and we have no concerns.
 - Policies 15, 16 these policies require the efficient use of water through ensuring the rate of take and annual volume are reasonable for the end use. We are satisfied that the use is efficient.
 - Policy 21 to require water metering. This is proposed as a condition of consent.
 - Policy 23 ensure shallow groundwater takes comply with the minimum flow regime. The take is partly from a shallow bore. The proposed minimum flow regime applies to the full take.
 - Policy 25 to allow restrictions above the minimum flow to be shared between users by means of a water users group. The proposed conditions of consent provide for this.
 - Policy 26 to set priority bands to achieve a stated reliability or maintain the existing reliability. This has been discussed above. The application is not consistent with this policy.
- 159. Overall, we consider that despite largely complying with the EFR, and being generally consistent with other policies (with the exception of Policy 26), the application is not consistent with Objective 1.

NPS Freshwater 2014

- 160. The applicant did not assess the proposal against the NPS.
- 161. The NPS Freshwater seeks to prevent over-allocation of both water quantity and water quality. The water quantity objectives are to safeguard the life-

supporting capacity and ecosystem processes of freshwater, avoid any further over-allocation and phase out existing over-allocation, maximise efficient allocation and efficient use of water, and protect significant values of wetlands.

- 162. The objectives are to be achieved by councils making or changing regional plans to:
 - establish freshwater objectives (Policy B1);
 - set environmental flows to give effect to the objectives (Policy B1);
 - provide for the efficient allocation of water to activities within the limits set (Policy B2);
 - set rules governing the transfer of water, to improve efficient allocation (Policy B3)
 - identifying methods to encourage efficient use of water (Policy B4)
 - setting a timeframe and methods to phase out over-allocation (Policy B6)

and by ensuring no decisions will likely result in future over-allocation (Policy B5).

- 163. Policy B7 of the NPS requires regional plans to be amended by inserting a policy into them, which will apply until necessary changes are made to give effect to Policies B1, B2 and B6. This policy has been included in the WCWARP. It reads:
 - "1. When considering any application the consent authority must have regard to the following matters:
 - a. the extent to which the change would adversely affect safeguarding the life-supporting capacity of fresh water and of any associated ecosystem and b. the extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.
 - 2. This policy applies to ... any new activity ... that involves the taking, using, damming or diverting of freshwater ... which is likely to result in any more than minor adverse change in the natural variability of flows or level of freshwater water, compared to that which immediately preceded the commencement of the new activity..."
- 164. The WCWARP achieves many of the requirements of the NPS and so implements it in most respects. However, it has no provisions to phase-out over-allocation and as discussed earlier, the EFR for the Hakataramea does set an allocation limit for the whole catchment. Consequently the EFR on its own cannot ensure the life-supporting capacity of the river is maintained. It appears to us that while the river allocation is not exceeded, the catchment as a whole is over-allocated, in that a freshwater objective, in this case Objective 1 of the WCWARP, is not being met.

- 165. Consequently, we do not consider that the application, which will result in additional allocation, is consistent with objectives B1 and B2, and policies B5 and B7.
- 166. In respect of the annual allocation, this application will not increase the overallocation or result in future over-allocation. The over-allocation already exists by the grant of the Brothers consent.
- 167. The NPS has two water quality objectives. Objective A1 is to safeguard the life-supporting capacity of fresh water and health of people and communities by sustainably managing the use and development of land and discharges of contaminants. Objective A2 includes maintaining or improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.
- 168. Policies require changes to regional plans to set freshwater objectives and freshwater quality limits, where those objectives are not met, specify targets and methods to achieve them, and imposing conditions on discharge permits (including diffuse discharges) to meet limits and targets. As with the water quantity section, a policy is to be inserted into regional plans until they are amended to fully implement the NPS. The policy is concerned with the consideration of discharge permits (including diffuse discharges) and has been inserted into the WCWARP.
- 169. In relation to this application, the use of land for farming, which results in the discharge of nutrients, is a permitted activity under the LWRP. As discussed earlier, the activity may additionally impact on water quality by reducing flows that might otherwise dilute nutrients within the river, however we consider this effect to be minor. The application is therefore consisten with the water quality provisions for the NPS.

Canterbury Regional Policy Statement

- 170. Ms Korevaar summarised the relevant provisions of the Canterbury Regional Policy Statement (CPRS). Objective 7.2.1 is to sustainably manage water resources to provide for communities' economic and social wellbeing, ensure life-supporting capacity, mauri and natural character are protected and community and stockwater needs are provided for. Policy 7.3.1 is to identify and protect or restore natural character values. Policy 7.3.3 is to promote or require the protection and restoration of water bodies, their associated Ngāi Tahu values, and protected significant habitats and vegetation, and maintain indigenous biodiversity.
- 171. These objectives and policies are largely implemented through the WCWARP, and in relation to land use and water quality, through the LWRP. The application is consistent with the provisions, to the extent that the

Hakataramea EFR protects instream values. As discussed earlier, it cannot achieve this on its own, as there is no limit on abstraction from the tributaries.

Land and Water Regional Plan

172. This applies only in relation to water quality issues. However as the use of farm for farming is a permitted activity under the LWRP, and there are no relevant rules in the NRRP, the objectives and policies are not considered further.

Section 104 (1)(c) - any other matters

Canterbury Water Management Strategy / Zone Implementation Programme

- 173. The CWMS is a strategy prepared to guide the management of freshwater in Canterbury. Its principles are to ensure that the first order priorities of the environment (that is, customary use, community and stockwater needs) are met, and to allow second order priorities, including irrigation, providing they do not impinge on the first order priorities.
- 174. Implementation of the CWMS is through the Zone Implementation Programmes (ZIP). Ms Soal explained that the Lower Waitaki South Coastal ZIP identifies the Hakataramea as a priority outcome area. It identifies a catchment specific plan as an outcome.
- 175. A ZIP addendum was released in July 2015. This includes recommendations in relation to water quantity and quality. In relation to water quantity, it is recommended that ECan addresses a variety of community concerns over allocation in the scheduled 10 year WCWARP review due to begin in 2016/17, and creates a hydrological model that can predict the effects on reliability of existing users from any further takes in the catchment. These recommendations reflect some of the concerns we have raised in this decision.

Summary

176. We have significant concerns about allocating further water from the Hakataramea. The application complies with the EFR in all but a very minor degree, however we do not think that the EFR achieves Objective 1 of the WCWARP, and the provisions of the NPS and RPS, because it applies only to the main stem. A considerable quantity of water has been allocated from the tributaries (over 800 l/s), subject to the A permit minimum flow of 500 l/s. This, together with the 472 l/s already allocated from the main stem, has cumulative effects on flows and levels in the river that the EFR does not appropriately manage. Despite the allocation being within the main stem

EFR, we consider allocation of the Hakataramea catchment as a whole to be over-allocated.

177. We have no doubt that existing over-allocation within the catchment has contributed to the collapse of the salmon spawning, and contributes to high water temperatures in summer. The WCWARP is to be reviewed in 2016/17 and it will be appropriate at that stage to re-consider the appropriateness of the EFR in light of abstraction from the entire Hakataramea catchment, not just the main stem.

Section 104D

- 178. As a non-complying activity, the application can only be granted if it passes the 'gateway' test of s104D. This requires that we must be satisfied that either the effects on the environment will be minor, or the activity will not be contrary to the objectives and policies of any relevant proposed or operative plan. In this case, the WCWARP and PC3 are relevant.
- 179. We have discussed the effects above, and have concluded that there are effects that are more than minor. Because of the failure to meet Objective 1 of the WCWARP, which we consider to be one of the most important objectives, we find that the application is contrary to the objectives and policies of the WCWARP. We acknowledge that it complies in many respects with the EFR, is consistent with the intent of Objective 2 (if not the detail), and complies with many other policies. It also complies with both allocation limits under PC3. However in our view the failure to ensure Objective 1 is met outweighs these considerations.
- 180. Given this finding, the application does not pass the s104D threshold, and cannot be granted.

DECISION

181. For the reasons given above, application CRC155773 is refused.

DATED the 4 day of September 2015

Signed: C. Christmen

E Christmas, Chair

Signed

H Thorpe, Commissioner

H.R. Thompes