BEFORE INDEPENDANT HEARING COMMISSIONERS APPOINTED BY THE CANTERBURY REGIONAL COUNCIL

UNDER: the Resource Management Act 1991

AND: the Environment Canterbury

(Transitional Governance Arrangements) Act 2016

IN THE MATTER OF: Proposed Plan Change 7 to the

Canterbury Land and Water Regional Plan – Section 14: Orari-Temuka-

Opihi-Pareora

LEGAL SUBMISSIONS ON BEHALF OF OPUHA WATER LIMITED (SUBMITTER NO. PC7-385)

Dated: 28 October 2020

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MAY IT PLEASE THE COMMISSIONERS

Introduction

- 1. These legal submissions are presented on behalf of Opuha Water Limited (OWL) in support of its submissions and further submissions on Proposed Plan Change 7 (PC7) to the Canterbury Land and Water Regional Plan (CLWRP).
- 2. OWL is a co-operative company that owns and operates the Opuha Dam, hydroelectric generation assets and water distribution infrastructure associated with the Opuha Scheme. Collectively, shareholders and water users pay over \$4.37 million to OWL annually via water and infrastructure charges to maintain the Dam facility and associated scheme irrigation infrastructure.1
- 3. Recognised by the Canterbury Regional Policy Statement as "regionally significant infrastructure", the Opuha Dam and Scheme has a significant role in the Opihi Freshwater Management Unit (Opihi FMU), augmenting the mainstems of the Opuha and Opihi Rivers which, in order of priority:2
 - (a) Maintains environmental flows in those rivers and provides for the strategic use of stored water for artificial freshes to manage the health of the downstream river and lagoon;
 - (b) Provides for 500 L/s of community water supply abstracted across four consents held by the Timaru District Council, including industrial processing water supply to Washdyke industries;
 - (c) Provides water for takes affiliated to the Opuha Scheme allowing the irrigation of around 12,740ha across its four sub-schemes³ and in the mainstems of the Opuha and Opihi Rivers;
 - (d) Compensating for the effect of affiliated takes from the South Opuha, North Opuha, Upper Opihi and Te Ana Wai Rivers on the mainstems of the Opuha and Opihi Rivers, which support a further 3,500ha of irrigation.

Evidence in Chief of Andrew Mockford on behalf of OWL, dated 17 July 2020, at [4.30].
 Evidence in Chief of Andrew Mockford on behalf of OWL, dated 17 July 2002, at [3.1], [4.2] – [4.4].

³ Levels Plain, Totara Valley, Sutherlands and Kakahu irrigation schemes.

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- 4. The benefits of the Dam since its commissioning in 1998 have been widely acknowledged. Firstly, in terms of its role in maintaining connectivity in the lower Opihi River when previously it regularly dried, and also helping maintain an open river mouth with less frequent, shorter duration closures than previously. Secondly, in terms of its role as a significant economic enabler for the OTOP Zone.
- 5. It is for these reasons that OWL has actively and constructively participated in both the ZIPA development phase and statutory planning process for PC7 in its primary capacity as a Principal Water Supplier and operator of regionally significant infrastructure, and also as a member of the Adaptive Management Working Group (AMWG) and facilitator of the Opihi Flow and Allocation Working Party (FAWP).
- 6. OWL's summary position on PC7 is largely one of support; it accepts the outcomes for the Opihi FMU sought to be achieved by PC7 and acknowledges that the Opuha Dam, and OWL as the operator of the Dam, will play a central role in contributing to the implementation of many of those outcomes. However, OWL has serious concerns about key aspects of Part B of PC7 that are crucial from the perspective of recognising and providing for current Scheme arrangements and enabling future intra-Scheme solutions.
- 7. Through its submissions and evidence for this hearing, OWL has sought to focus on a detailed response to those concerns and to provide the Hearings Panel with a complete picture of the Opuha Dam, the Opuha Scheme and its constituent parts, and the consenting framework within which OWL, the Dam and the Scheme operate due to the often conflicting and erroneous descriptions provided variously though the supporting documentation for PC7 and the Section 42A Report.
- 8. In relation to the aspects of PC7 addressed by OWL's submissions that are in common with the AMWG and FAWP, OWL adopts and endorses the legal submissions and evidence of those parties. For the sake of brevity, those submission points are not addressed further in these legal submissions. However, the background to OWL's involvement in those stakeholder groups and its support for their respective positions on PC7 are canvased in the

⁴ Joint Witness Statement – Freshwater Quality/Ecology, at [35].

⁵ As noted in Mr Mockford's Evidence in Chief on behalf of OWL, at [4.5], a Ministry of Economic Development study conducted in 2006 confirmed the Dam added \$124 million to the South Canterbury economy and \$20 million/year to the district's households, creating 500 new full time jobs.

- evidence of OWL's Chair, Mr Ryan O'Sullivan, and Chief Executive, Mr Andrew Mockford.
- 9. OWL has refined its position on other matters following a review of Council's Section 42A Report, through the preparation of evidence and following expert witness caucusing. The legal submissions that follow therefore address residual matters concerning the following provisions of PC7:
 - (a) Water permit definitions⁶ (Section 14.1A);
 - (b) Surface water take provisions (Policy 14.4.6B; Rules 14.5.4 and 14.5.5);
 - (c) Water permit transfer provisions (Policy 14.4.40 and Rules 14.5.31 and 32);
 - (d) Freshwater outcomes for Lake Opuha (Section 14.6.1, Table 14(b)); and
 - (e) Opihi FMU allocations (Section 14.6.2, Table 14(ua)).
- 10. To assist the Hearings Panel, Annexure A to these submissions sets out the amendments OWL seeks to the provisions referred to in [9], which are presented as tracked changes to the "Consolidated Officer Recommendations" version of PC7 dated 10 July 2020.
- 11. OWL relies on the evidence of the following expert and other witnesses:

| Witness / Role | Description of evidence | | | | | |
|--|---|--|--|--|--|--|
| Ryan O'Sullivan, Chairman of OWL's Board of Directors. | Background to the Opuha Dam, overview of contextual matters relevant to OWL's submission on PC7. | | | | | |
| Andrew Mockford, OWL's Chief Executive. | Background to OWL, the Opuha Dam, Opuha Scheme, OWL's contributions to the OTOP ZIPA 'solutions package', OWL's collaborative work pre and post | | | | | |

⁶ "AA permit", "BA permit", "AN permit", "BN permit", "Kakahu permit".

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| | | notification of PC7, and an overview of OWL's summary position on PC7. | | | |
|---|---|--|--|--|--|
| Julia Crossman, O Environmental Manager. | WL's | Consenting framework for the Opuha Dam and Scheme, affiliated and non-affiliated water permits in the Opihi catchment, background to OWL affiliation and water entitlements, OWL's key concerns with PC7 and implications for the Opuha Scheme and the Section 42A Report. | | | |
| Keri Johnston , Director of In Resource Solutions Ltd. | Expert witness, surface water hydrology. | | | | |
| Richard Measures, Hydrodyna Scientist, NIWA. | Expert witness, Lake Opuha water quality. | | | | |
| Dr Gregory Ryder , Environm Scientist, Ryder Environmental | Expert witness, freshwater quality and ecology. | | | | |
| Timothy Ensor , Principal Pla Tonkin and Taylor Ltd. | Expert witness, planning. | | | | |

WATER PERMIT DEFINITIONS

- 12. For OWL, it is essential that PC7 appropriately recognises the existing scope of affiliated water permits and enables the 6.974 cumecs of water currently allocated to the Scheme⁷ to remain "in-Scheme".⁸ This would be precluded if PC7's water permit definitions, which describe affiliation with reference to shares held in OWL only, were confirmed.⁹
- 13. Ms Crossman's evidence indicates that PC7B's approach by defining water permit classes with reference to OWL shareholding only, which the Reporting Officers recommend be retained:

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⁷ Evidence in Chief of Mr Andrew Mockford on behalf of OWL, dated 17 July 2020, at [4.33].

⁸ Evidence in Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.16].

⁹ Submission Point PC7-381.12, 13, 14 and 15.

- (a) Is contrary to ECan's historical consenting practice for issuing AA and BA permits to those with *shares, agreements or entitlements*;¹⁰
- (b) Would render:
 - (a) 361.14 L/s of Scheme water currently taken pursuant to BA water permits;¹¹ and
 - (b) 280 500 L/s of carriage water currently taken pursuant to "AA"
 or "BA" sub-Scheme water permits;¹²

AN or BN allocation when those permits come due for replacement, which would have:

- (c) Significant consequential operational implications due to the resulting change in minimum flow requirements applying to the "non-shared" components of those permits¹³; and
- (d) Preclude future opportunities for operational and efficiency enhancements around the Scheme e.g. through capturing bywash or lining or piping the open race in the Levels Plain Scheme.¹⁴
- 14. The Reporting Officers have raised concerns that revising the definitions to describe affiliation in terms of *shares*, *agreements or entitlements* as requested by OWL would result in a "lack of transparency" and the "potential to result in over-allocation". However, as Ms Crossman and Mr Ensor have explained¹⁵, these claims are unfounded. Further, it is doubtful whether PC7 was ever intended to unnecessarily limit the scope of affiliated permits and abstraction authorised by them as suggested by the Reporting Officers.
- 15. Notwithstanding that, Ms Crossman has suggested an alternative approach to provide greater certainty whereby affiliation would be linked to the consent holder holding a water supply agreement with OWL.¹⁶ The proposed textual amendments reflecting that approach are set out in **Annexure A** to these legal submissions, which also address an additional (minor) issue identified by Ms

¹⁰ Primary Evidence of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.7].

¹¹ Evidence in Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.7].

¹² Evidence in Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.7].

¹³ Evidence in Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.8] – [8.12].

¹⁴ Evidence in Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.14];

¹⁵ Evidence in Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.16]; Evidence in Chief of Timothy Ensor on behalf of OWL, dated 17 July 2020, at [5.5] – [5.6].

¹⁶ Evidence in Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.17].

Crossman¹⁷, regarding the need for the definitions to recognise the sub-class of affiliated (AA and BA) water permits for OWL's sub-schemes, which are held by OWL.

Take and use of surface water / transfers of water permits

- 16. Mr Mockford has detailed OWL's future aspirations for the Opuha Scheme, which include: 18
 - (a) A drive for improving efficiencies, including automation within the sub-scheme irrigation distribution infrastructure;
 - (b) The direct supply of shared tributary takes from mainstem (augmented flows) or Lake Opuha as financial resources and consenting allows;
 - (c) The global consenting of all scheme takes; and
 - (d) Potentially, a scheme-wide nutrient discharge consent.
- 17. These aspirations underpin those aspects of OWL's submission on PC7 that seek to ensure the future planning framework for the Opihi FMU appropriately recognises and provides for current Scheme arrangements and does not foreclose opportunities for intra-Scheme infrastructure solutions in the long-term.
- 18. OWL acknowledges that various improvements to the PC7 policy and rule framework have been recommended by the Reporting Officers in response to OWL's primary submissions in this regard. However, as is apparent from the evidence of Ms Crossman and Mr Ensor, the following matters still require attention:
 - (a) An amendment to Condition 1 of Rule 14.5.4 to recognise the requirement of Table 14(y) that BN takes from the South Opuha and North Opuha Rivers are subject to *Lake Level limits* (in addition to minimum flows);¹⁹
 - (b) Amendments to the following matters of discretion in Rule 14.5.4 as follows:

¹⁹ Submission Point PC7-381.54.

¹⁷ Evidence in Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.19] – [8.20].

¹⁸ Evidence in Chief of Andrew Mockford on behalf of OWL, dated 17 July 2020, at [4.46].

- Matter of discretion 2: to remove the duplication of matters (i) concerning water quality addressed elsewhere in PC7 and replace with a matter of discretion relating to relevant flow and allocation regimes.20
- (ii) Matter of discretion 13: to include an exemption for affiliated water permits from the requirement to reduce the rate and volume of lawfully established takes in over-allocated catchments on replacement²¹, consistent with the Officer's recommendations in relation to the similar exemptions in Rule 14.5.12 (Condition 5(b)) and to ensure full implementation of the OTOP ZIPA recommendation 4.9.5²².
- Provision of consenting pathways for the following by way of (c) amendments to Rule 14.5.4, 14.5.12 and/or a new rule:
 - (i) Substituting/transferring tributary AA and BA takes to either Lake Opuha²³ or the mainstem of the Opuha or Opihi Rivers²⁴;
 - New BN takes from the North Opuha River, South Opuha River (ii) and Lake Opuha that can be activated when the water level in Lake Opuha is below RL391.2, subject to an agreement between the consent holder and OWL being in place;²⁵ and
- In relation to water permit transfers to a Principal Water Supplier: (d)
 - (i) Amendments to Policy 14.4.40 to include reference to "Kakahu Permits" as a consequence of the Officer's recommended changes to Rule 14.5.3126; and
 - Amendments to Rule 14.5.31 to:²⁷ (ii)
 - enable the global consenting of water permits on either a tributary (or sub-catchment) or Scheme-wide basis;28 and

²⁰ Submission Point PC7-381.56 and 58. Addressed by Mr Ensor in his Evidence in Chief for OWL, at [8.7].

²¹ Submission Point PC7-381.57.

²² Evidencecin Chief of Julia Crossman on behalf of OWL, dated 17 July 2020, at [8.28] – [8.30]. Also addressed by Mr Ensor in his primary evidence for OWL at [8.8] - [8.9].

²³ Addressed by Mr Ensor in his primary evidence for OWL, at [8.3] – [8.5].

²⁴ Submission point PC7-381.60, 61 and 72. Addressed by Mr Ensor in his primary evidence for OWL, at [7.1] -[7.12].

⁵ Submission point PC7-381.60 and 61. Addressed by Mr Ensor in his primary evidence for OWL, at [8.10] – [8.12]. ²⁶ Consequential to Submission Point PC7-381.78.

²⁷ Addressed by Mr Ensor in his Evidence in Chief on behalf of OWL, at [7.13] – [7.18].

²⁸ Submission Point PC7-381.80.

- ensure non-shared affiliated water permits can transferred (i.e. those affiliated permits where an agreement is held or other entitlements have been granted by OWL).29
- 19. None of these requests have been expressly considered by the Reporting Officers, and we note that none of the related submission points have been opposed by any further submission.
- 20. In our submission, these requests are entirely reasonable and appropriate. Together with OWL's request for PC7 to include Opihi FMU-wide (surface water) allocation limits based on current consent holding and BN allocation headroom, none of the requests would result in over-allocation, but will simply provide greater flexibility and options, including achieving improvements in efficiencies across the Opuha Scheme and reducing abstraction pressure on the main tributaries of the Opihi FMU. Overall, we submit that OWL's requested changes are necessary to future proof PC7.

Freshwater Outcomes for Lake Opuha

Dissolved oxygen

- 21. Mr Measures has considered Ms Hayward's response to questions from the Hearings Panel on the first day of the hearing in relation to the dissolved oxygen outcomes for Lake Opuha in Table 14(b).30
- 22. While there is agreement that Table 14(b) should provide a lake-bottom and mid-hypolimnion outcome for Lake Opuha, both within Band B, in addition to an averaging period for interpreting continuously monitored dissolved oxygen data against those outcomes, Mr Measures has reached a different view to Ms Hayward about what those outcomes and the averaging period should be. Their respective recommendations are as follows:

²⁹ Submission Point PC7-381.78.

³⁰ Second set of answers to Day 1 questions dated 13 October 2020, at pages 9 and 10.

| | Measures ³¹ | Hayward ³² |
|-----------------------------------|------------------------|-----------------------|
| Lake-bottom DO outcome | 2 mg/L | 5 mg/L |
| Mid-hypolimnion DO outcome (mg/L) | 5mg/L | 6 mg/L |
| Averaging period | 24 hour | 1 hour |

- 23. Regrettably, Ms Hayward's recommendations do not appear to have been informed by the same level of site-specific analysis and careful consideration undertaken by Mr Measures. As outlined in the update to his evidence, Mr Measures' recommendation has been informed by his consideration of the threshold of effects addressed by the various attribute bands for dissolved oxygen in Lakes under the National Policy Statement for Freshwater Management 2020, and also Lake Opuha's monitoring data from the preceding two summers. In our submission, those matters are directly relevant to the Hearings Panel's determination, and accordingly Mr Measures' recommendations should be preferred to Ms Haywards' blanket preference for the outcomes to be set "...in..." and "...around..." the "...middle of Band B".
- 24. We also submit that Mr Measures' preferred (24 hour) averaging period should be preferred for the various reasons set out in his primary evidence³³, in addition to the concerns he has raised with the alternative proffered by Ms Hayward, as follows:³⁴

Using a 1-hour averaging period, as suggested by Environment Canterbury, would mean that compliance with a limit would be strongly influenced by short duration variability in the data caused by factors such as currents introduced by intermittent power station operation and aeration, as well as diurnal temperature variations. These short-term variations are hard to predict, and aeration takes several days to be effective. Trying to manage to a limit defined in terms of a 1-hour average would be highly impractical.

³¹ Update to Evidence of Richard Measures on behalf of OWL, dated 27 October 2020.

³² Second set of answers to Day 1 questions dated 13 October 2020, at pages 9 and 10.

³³ Evidence in Chief of Richard Measures on behalf of OWL, dated 17 July 2020, at [6.1] – [6.6].

³⁴ Update to evidence of Richard Measures, dated 27 October 2020, at [4.3].

Other Lake Opuha outcomes

- 25. In our submission, further amendments to PC7 are also required to reflect the agreement reached and recorded in [20] – [22] of the Joint Witness Statement – Freshwater Quality/Ecology in relation to:
 - The metric and numerical values for TLI and chlorophyll-a;35 and (a)
 - The visual quality attribute of colour.³⁶ (b)
- 26. The amendments proposed by OWL are set out in **Annexure A**.

Opihi FMU Allocation

- 27. Ms Johnston has updated her primary evidence for OWL in light of the agreement reached and recorded in the Joint Witness Statement – Hydrology in relation to consented allocations across the Opihi FMU. Ms Johnston has set out a revised recommendation to address OWL's request that the Officer's recommended Table 14(ua) provide appropriate AA+AN and BA+BN allocation limits for the Opihi FMU. That recommendation is for Table 14(ua) to be amended to include:
 - (a) An AA+AN allocation limit of 4,687 L/s, being the sum of the agreed total current (consented) AA and AN allocations across the Opihi FMU³⁷; and
 - (b) A BA+BN allocation limit of 9,951 L/s, being the agreed total current (consented) BA allocation across the Opihi FMU (5,351 L/s) plus the BN allocations under Table 14(y) as notified (which including current (consented) allocation plus allocation "headroom") (4,600 L/s).
- 28. In his primary evidence, Mr Ensor explained the advantages of including Opihi FMU-wide allocation limits in PC7 from a planning perspective:³⁸

First it makes it clear in one location in the plan what the allocation blocks are for the FMU. Secondly, the FMU allocation limit would provide a consenting pathway for existing takes from surface water bodies not currently included as part of the allocation regime to be replaced on expiry. Thirdly, subject to amendments to PC7 Rule

³⁵ Joint Witness Statement - Freshwater Quality/Ecology, at [21].

 ³⁶ Joint Witness Statement – Freshwater Quality/Ecology, at [22].
 ³⁷ Joint Witness Statement – Hydrology, at [19].

³⁸ Evidence in Chief of Timothy Ensor on behalf of OWL, dated 17 July 2020, at [6.3].

14.5.12 addressing the transfer of water permits (discussed below), the FMU allocation block assists in managing the transfer of affiliated water permits from tributary catchments to the Opihi mainstem. Further, the OWL submission sought amendments to Rule 14.5.4, or the inclusion of a new rule, to provide for the take and use of water from Lake Opuha, which will be discussed later. The inclusion of an FMU allocation limit also helps provide for this option.

29. In our submission, PC7 would be incomplete without the inclusion of Opihi FMU-wide allocation limits as requested by OWL and Ms Johnston's recommendation is a suitable solution for addressing this critical 'gap' in PC7 as notified.

G C Hamilton / N A Hornsey

Counsel for Opuha Water Limited

Dated: 28 October 2020

ANNEXURE A - PC7 CHANGES SOUGHT BY OWL

Note: OWL's proposed changes are shown in <u>bold blue</u> tracked changes to the Reporting Officer's Consolidated Recommended Changes to PC7 dated 10 July 2020 (which show recommended changes in red text).

14.1A Orari- Temuka-Opihi-Pareora Definitions

Definition of AA permits

.... where the consent holder <u>is Opuha Water Limited or</u> holds <u>shares in</u> <u>a current written</u> <u>water supply agreement with</u> Opuha Water Limited.

Definition of AN permits

.... where the consent holder is not Opuha Water Limited or does not holds shares in a current written water supply agreement with Opuha Water Limited.

Definition of BA permits

.... where the consent holder <u>is Opuha Water Limited or holds shares in a current written</u> water supply agreement with Opuha Water Limited.

Definition of BN permits

.... where the consent holder <u>is not Opuha Water Limited or</u> does not holds shares in <u>a</u> current written water supply agreement with Opuha Water Limited.

14.4 Policies

14.4.40 Contribute to the overall management of surface water flows within the Opihi
Freshwater Management Unit, by providing for the transfer of AA, and
BA and Kakahu surface water permits to a principal water supplier where
this will result in a single permit authorising the abstraction of all
transferred AA and BA abstractions of surface water.

14.5 Rules

Take and Use of Surface Water

- 14.5.4 The taking and use of surface water is a restricted discretionary activity, provided the following conditions are met:
 - 1. The take, in addition to all existing consented takes, does not result in an exceedance of any:
 - a. minimum flow limit set in Tables 14(h) to 14(za); and
 - b. Lake level limit set in Table 14(y); and
 - 2. The take:
 - a. will replace a lawfully established take affected by the provisions of Section 124-124C of the RMA, and the take, in addition to all existing consented takes, will not result in an exceedance of any allocation

- limit, or rate of take, or seasonal or annual volume limit set in Tables 14(h) to 14(za): or
- b. will not replace a lawfully established take affected by the provisions of Section 124-124C of the RMA, but the take, in addition to all existing consented takes, will not result in an exceedance of any allocation limit, or rate of take, or seasonal or annual volume limit, set in Tables 14(h) to 14(za); and
- 3. Unless it is associated with the artificial opening of a hāpua, lagoon or coastal lake to the sea, the take is not from a wetland, hāpua or a high naturalness waterbody listed in Section 14.8

The exercise of discretion is restricted to the following matters:

- 1. The rate, volume and timing of the take; and
- 2. The actual or potential adverse environmental effects on water quality, including whether the activity, in combination with all other activities, will alter the allocation status for water quality in the relevant catchment; and The appropriateness of existing conditions, including conditions on minimum flow, seasonal or annual volume and other restrictions to mitigate effects and the need to update these to reflect the flow and allocation regime applying at the time that the application is made; and
- 3. Whether the amount of water to be taken and used is reasonable for the proposed use. In assessing reasonable use for irrigation purposes, the CRC will consider the matters set out in Schedule 10; and
- 4. For water used for irrigation, the management of water allocation and resulting nutrient discharges on individual farms; and
- 5. The potential effects on groundwater recharge where the groundwater allocation zone in Table 14(zb) is fully or over-allocated; and
- 6. The availability and practicality of using alternative supplies of water; and
- 7. The effects the take has on any other authorised take or diversion; and
- 8. The potential to frustrate or prevent the attainment of the regional network for water harvest, storage and distribution, shown on the Regional Concept diagram in Schedule 16; and
- 9. The reduction in the rate of take in times of low flow and restrictions to prevent the flow from falling below the minimum flow as set out in policies to this Plan; and
- 10. Methods to prevent fish from entering the water intake; and
- 11. The provisions of any relevant Water Conservation Order; and
- 12. The proximity and actual or potential adverse environmental effects of water use on any significant indigenous biodiversity and adjacent dry land habitats; and

- 13. Where the proposed take is the replacement of a lawfully established take affected by the provisions of Section 124-124C of the RMA and is from an over-allocated surface water catchment, the reduction in the rate of take and volume limits to enable a reduction in over-allocation except where the water taken under the water permit is in the AA, BA or Kakahu allocation blocks; and
- 14. Where the water is to be used for irrigation, the preparation and implementation of a Farm Environment Plan in accordance with Schedule 7 that demonstrates that the water is being used efficiently; and
- 15. Any adverse effects of the use of water on Ngāi Tahu values or on sites of significance to Ngāi Tahu, including wāhi tapu and wāhi taonga.
- 14.5.5A The taking and use of surface water that does not meet condition 1b of Rule
 14.5.4 is a non-complying activity, provided the following condition is met:
 - 1. The applicant holds shares, an agreement with or other entitlements from Opuha Water Limited for the proposed take.
- 14.5.6 The taking and use of surface water that does not meet one or more of conditions 1 or 2b of Rule 14.5.4, or condition 1 of Rule 14.5.5A is a prohibited activity.

Transfer of Water Permits

- 14.5.12 The temporary or permanent transfer, in whole or in part, (other than to the new owner of the site to which the take and use of water relates and where the location of the take and use of water does not change) of a water permit to take or use surface water or groundwater, is to be treated as if it is a restricted discretionary activity provided the following conditions are met:
 - Unless the water taken under the water permit is in the AA, BA or Kakahu allocation blocks, t\(\pi\)he water permit being transferred has been exercised: and
 - 2. The reliability of supply for any other lawfully established water take is not reduced; and
 - 3. Unless the water taken under the water permit is in the AA, BA or Kakahu allocation blocks, aAny proposed volume to be transferred for irrigation has been calculated in accordance with Method 1 of Schedule 10; and
 - 4. The proposed transfer is not from the Temuka Freshwater

 Management Unit; and
 - Unless the transfer is for a community water supply or a stock drinking water supply:

- a. the take will comply with the applicable environmental flow and allocation regimes set out in Tables 14.4(h) to 14.4(zb); and
- b. if the proposed transfer is located within an overallocated surface water catchment or Groundwater Allocation Zone, the resource consent application includes a percentage of water to be surrendered, up to a maximum of 75%, that matches the extent to which the surface water catchment or Groundwater Allocation Zone is over-allocated, except where the water taken under the water permit is in the AA, BA or Kakahu allocation blocks, in which case there shall be no surrender requirement; and
- 6. <u>a.</u> The point of take remains within either the same surface water catchment or Groundwater Allocation Zone; <u>or and</u>
 - b. The transfer is of an AA or BA permit in the North
 Opuha, South Opuha, Upper Opihi or Te Ana Wai Rivers
 to the mainstem of the Opihi River or Lake Opuha.
- 7. In the case of groundwater, the application contains evidence that the bore interference effects as set out in Schedule 12 are acceptable; and
- 8. For stream depleting groundwater takes, the stream depletion effect is no greater in the transferred location than in the original location.

The exercise of discretion is restricted to the following matters:

- 1. The nature of the transfer, whether short term, long term, partial or full, and the apportioning of the maximum rate and seasonal or annual volume in the case of a partial transfer; and
- 2. The appropriateness of existing conditions, including conditions on minimum flow, seasonal or annual volume and other restrictions to mitigate effects and the need to update these to reflect the current flow and allocation regime; and
- 3. The reasonable need for the quantities of water to be transferred, the intended use of the water and the ability of the transferee to abstract and use those quantities; and
- Any restrictions to be applied to the rate of take in times of low flow;
- 54. Method to prevent fish from entering any water intake; and
- 65. Where there is a change to the use of the water, or a change in the location the water is used, any adverse effects on Ngāi Tahu values including mahinga kai and the mauri of waterbodies, and the

appropriateness of any mitigation measures including a lesser amount of water sought.

Transfer of AA and BA Water Permits to a Principal Water Supplier

- 14.5.31 Within the Opihi Freshwater Management Unit the transfer to a Principal Water Supplier of AA, and BA, and Kakahu permits to take and use surface water is a discretionary activity provided the following conditions are met:
 - 1. The application for resource consent is for the transfer of existing authorised AA, and BA, and Kakahu permits in the Opihi Freshwater Management Unit;
 - There is no net increase by sub catchment in the total instantaneous rate
 of take beyond what is authorised to be abstracted under transferring AA,
 and BA, and Kakahu permits, determined as the lesser of current
 consented instantaneous rates of take or shareholding entitlements
 with Opuha Water Limited; and
 - 3. The abstractions will not result in an exceedance of the applicable environmental flow and allocation regimes set out in Tables 14(v) and 14(w) of this pPlan.
 - 4. All existing authorised AA, and BA, and Kakahu water permits held by the transferees are surrendered as part of any application for resource consent lodged under this rule.

14.6 Environmental Flow, Allocation and Water Quality Limits and Targets

14.6.1 Freshwater Outcomes

Table 14(b): Freshwater Outcomes for Orari-Temuka-Opihi-Pareora Lakes to be achieved by 2030

| | | | Ecological Health Attribute | | | | Eutrophication Attribute | | Visual Quality Attribute | Human Health for Recreation | | | | | |
|--------------------|-------------------------------------|---------------|--|---|---------------------------|---------------------|---|---|------------------------------------|-----------------------------|-----------------------------------|---|----------|--------------------|--|
| Freshwater | | | Dissolved of saturation co | | | | Chlorophyll a | | | | Escherichia coli (E. coli) | | | | |
| Management Unit | Lake type Lake | Lake | Minimum Hypolimnion (%) Lake Bottom (mg/L) | Minimum Epilimnion (%) Mid Hypolimnion (mg/L) | Temperature [max] (oC) | SPI¹ [min grade] | TLI ² Maximum annual average | Maximum annual average [mg chl-a/m²] [mg/L] | Annual Colour maximum [mg/L] | [max value] | Median [<i>E.colil</i> 100ml] | 95 th percentile (<i>E.coli</i> /100ml) | SFRG 345 | Cultural Attribute | |
| Opihi | Natural Artificial lakes – on river | Lake Opuha | 70 ≥ <u>2</u> | 90 ≥ <u>5</u> | 19 | High | ≤4.0 | ≤4.0 | 25 | <u>N/A</u> | 0.5 | ≤130 | ≤540 | Good | Freshwater mahinga kai species sufficiently abundant for customary gathering, water quality is suitable for their safe harvesting, and they are safe to eat. |

¹ Lake SPI = Lake Submerged Plant Indicators from Clayton J, Edwards T (2002) LakeSPI: a method for monitoring ecological condition in New Zealand lakes (Technical report Version 1 by NIWA)

543 SFRG = Suitability for Recreation Grade from Microbiological Water Quality Guidelines for Marine and Freshwater Recreational Areas, Ministry for the Environment 2003

² TLI = Trophic Level Index from: Protocol for Monitoring Trophic Levels of New Zealand Lakes and Reservoirs (Report by Lakes Consulting, March 2000)

³ Determined from a minimum of 60 samples collected on a monthly basis over 5 years.

⁴ Where continuous measurements of dissolved oxygen are recorded, the 24-hour average shall be used to assess compliance against the dissolved oxygen outcomes.

Table 14(ua): Allocation Blocks in the Opihi Freshwater Management Unit

| <u>River</u> | Allocation Block | Allocation Limit (L/s) |
|---------------------|-------------------------|------------------------|
| Opuha River + Opihi | AA + AN + BA | 5600 4687 |
| Mainstem | BA + BN | <u>9951</u> |