

From: [James Pearse](#)
To: [Mailroom Mailbox](#)
Subject: Plan Change 7 to the LWRP Submission
Date: Friday, 13 September 2019 1:26:40 PM
Attachments: [PC 7 submission James Pearse.docx](#)

hi,
please find the attached submission
regards
james pearse

SUBMISSION ON PROPOSED PLAN CHANGE 7 TO THE CANTERBURY LAND AND WATER REGIONAL PLAN

Clause 5 First Schedule, Resource Management Act 1991

TO: Proposed Plan Change 7 to the Canterbury Land and Water Regional Plan

Environment Canterbury
PO Box 345
Christchurch 8140

By email: mailroom@ecan.govt.nz

Name of submitter:

- 1 Name: Tregellen Farm Limited
Address: 70 Pearse Road, Waitohi, RD 25 Temuka
Contact: James Pearse
Email: Jamespearse308@gmail.com

Trade competition statement:

- 2 James Pearse could not gain an advantage in trade competition through this submission.

Proposal this submission relates to is:

- 3 This submission is on proposed Plan Change 7 (PC7) to the Canterbury Land and Water Regional Plan (PC7).

Wish to be Heard:

- 4 I wish to be heard in support of this submission.
5 I would be prepared to consider presenting a joint case with others making similar submissions at the hearing.

James Pearse

Date: 13 September 2019

Submission

Background

Tregellen Farm Limited is a beef and deer farm located in Totara Valley, South Canterbury.

80 Opuha Water shares are owned by the farm. Water is pumped from Gardeners Pond at the bottom end of the Totara Valley scheme. It is applied to the farm through a combination of K-line and centre pivot irrigation.

Totara Valley Stream borders the farm on one side, and Totara Valley Stock Water Race runs through the centre of the property.

I was a member of the OTOZ Zone Committee from 2015-2018.

PLAN CHANGE 7 - REASONS FOR SUBMISSION AND DECISIONS SOUGHT BY Tregellen Farm

The specific provisions of PC7 that my submission relates to are:		My submission is that:		I seek the following decisions from Environment Canterbury (ECan)
Section & Page Number	Sub-section/ Point	Oppose/ support (in part or full)	Reasons	
14.1A Orari-Temuka-Opihi-Pareora Definitions (pages 125 to 128)	"Pro Rata Partial Restrictions"	Oppose in part	<p>In relation to the proposed partial restriction regimes for the North Opuha, Upper Opihi and Te Ana Wai rivers set out in Section 14.6.2 <i>Environmental Flow and Allocation Regimes</i>, the proposed definition of "pro-rata partial restriction" would require AA and BA permits, that are operated as part of a water user group, to start pro-rata partial restrictions when surface water flows correspond to the particular tributary's minimum flow plus the sum of all AA, AN and BA allocations for the tributary.</p> <p>This approach fails to take into account the fact that AN permit holders are required to cease abstraction according to the Opihi River mainstem minimum flows at State Highway 1 (set out in Table 14(u)) before partial restrictions commence in the tributaries. It is therefore unnecessary for AN allocation to be accounted for in the partial restriction "management block" for AA and BA Permits in the North Opuha, Upper Opihi and Te Ana Wai rivers.</p> <p>Including AN allocation in the partial restriction "management block" for AA and BA Permits, would reduce the amount of water available for abstraction under AA and BA permits at critical times for irrigation, with adverse implications for pasture production and consequently farm business viability and/or profitability. Such "costs" of the implementation of the proposed definition are unjustified when the alternative above would achieve the same ecological objective (i.e. protection of the tributary minimum flows) as PC7.</p>	Amend definition of "Pro-rata partial restriction" so that AA and BA permits that are operated as part of a water user group are subject to pro-rata partial restrictions that commence when the flows in the North Opuha, Upper Opihi and Te Ana Wai River correspond with the minimum flow for the tributary, plus the sum of the allocation authorised for abstraction under AA and BA permits that are being operated as part of a water user group.
14.4 Policies				
Abstraction of water (page 132)	14.4.6B (Takes for storage)	Support	I consider that enabling water abstracted under AA, BA, AN and BN permits (in particular) to be used for storage is an appropriate mechanism to offset at least some of the reduction in reliability of water supply that is anticipated from the implementation of the environmental flow and allocation regimes introduced by PC7.	Retain Policy 14.4.6B as notified.
14.6.2 Environmental Flow and Allocation Regimes (pages 166-171)	Table 14(m): North Opuha Environmental Flow and Allocation Regime – AA, AN, BA Permit	Support in part	<p>Subject to the submission point relating to the definition of "Pro-rata restriction" above, I support the environmental flow, allocation and partial restriction regime proposed in Table 14(m), which is consistent with the Flow and Allocation Working Party's (FAWP) recommendations to the OTOP Zone Committee. I believe this proposed regime will:</p> <ul style="list-style-type: none"> • implement Recommendation 5.3.2(l) Table 12 of the OTOP ZIPA; • incentivises the formation and operation of water user groups and therefore, water use efficiency; 	Subject to the relief sought in relation to the definition of "Pro-rata restriction", retain Table 14(m) as notified.

	From 1 January 2025		<ul style="list-style-type: none"> assist in achieving the water quality and quality outcomes of the various higher order planning instruments. 	
	Table 14(n): South Opuha Environmental Flow and Allocation Regime – BA Permit From 1 January 2025	Support in part	<p>I support the environmental flow, allocation and partial restriction regime in Table 14(n), which is consistent with the FAWPs recommendations to the OTOP Zone Committee. I believe this proposed regime will:</p> <ul style="list-style-type: none"> implement Recommendation 5.3.2(I) Table 9 of the OTOP ZIPA; incentivises the formation and operation of water user groups and therefore, water use efficiency; assist in achieving the water quality and quality outcomes of the various higher order planning instruments. 	Retain Table 14(n) as notified.
	Table 14(o): South Opuha Environmental Flow and Allocation Regime – BA Permit From 1 January 2030	Oppose in full	<p>The increases in environmental flows in 2030 for South Opuha proposed in Table 14(o) will result in measurable reductions in the amount of water presently available for abstraction, and consequently, current levels of pasture production. The anticipated reductions in pasture production will have a significant adverse effect on the viability and/or profitability of farm businesses in the South Opuha catchment. These significant costs are not justified for the incremental environmental benefit anticipated.</p> <p>I consider that the need (or otherwise) for increases beyond the 2025 environmental flows proposed in Table 14(o) would be best addressed at the time of ECan’s next review of the OTOP sub-regional provisions (which should commence prior to 2030). This could then be informed by the water quality and quantity data gathered during the intervening period.</p> <p>I therefore consider that Table 14(o) should be deleted.</p>	<p>(a) Delete Table 14(o) in its entirety; and</p> <p>(b) As part of its expected 10-year review of the OTOP sub-regional plan provisions (in 2030 or prior), determine whether any increases beyond the environmental flows set out in Table 14(n) environmental flow regime is necessary in light of water quality and quantity data gathered during the intervening period and the directives of the higher order planning instruments applying at the time of such review.</p>
	Table 14(p): Upper Opihi Environmental Flow and Allocation Regime – AN and BA Permits From 1 January 2025	Oppose in part	<p>Subject to the submission point relating to the definition of “Pro-rata restriction” above, the Catchment Group supports the environmental flow, allocation and partial restriction regime in Table 14(p), is consistent with the FAWPs recommendations to the OTOP Zone Committee. I/we believe this proposed regime will:</p> <ul style="list-style-type: none"> implement Recommendation 5.3.2(I) Table 14 of the OTOP ZIPA; incentivises the formation and operation of water user groups and therefore, water use efficiency; assist in achieving the water quality and quality outcomes of the various higher order planning instruments. <p>The Upper Opihi water users (with Opuha Water Ltd (OWL)) have reviewed the current consented allocations and shared allocations for the Upper Opihi and have identified a discrepancy in the allocation limit of 474 L/s included in Table 14(p), which does not account for all shareholding in that catchment. Based on this assessment, in order for the allocation limit to reflect current allocations (being based on the lesser of the shared or consented allocations), the allocation limit should be 493.45 L/s, which comprises 428.05 L/s of BA allocation and 65.4 L/s of AN allocation.</p>	Subject to the relief sought in relation to the definition of “Pro-rata restriction”, amend the allocation limit in Table 14(p) to reflect OWL shareholding, to 493 L/s.
	Table 14(q): Upper Opihi Environmental Flow and Allocation Regime – AN	Oppose in full	<p>The increases in environmental flows in 2030 for the Upper Opihi proposed in Table 14(q) will result in measurable reductions in the amount of water presently available for abstraction, and consequently, current levels of pasture production. The anticipated reductions in pasture production will have a significant adverse effect on the viability and/or profitability of farm businesses in the Upper Opihi catchment. These significant costs are not justified for the incremental environmental benefit anticipated.</p>	<p>(a) Delete Table 14(q) in its entirety; and</p> <p>(b) As part of the expected 10-year review of the OTOP sub-regional plan provisions (in 2030 or prior), determine whether any increases beyond the environmental flows set out in Table</p>

	and BA Permits From 1 January 2030		<p>I consider that the need (or otherwise) for increases beyond the 2025 environmental flows proposed in Table 14(p) would be best addressed at the time of ECan's next review of the OTOP sub-regional provisions (which should commence prior to 2030). This could then be informed by the water quality and quantity data gathered during the intervening period.</p> <p>I therefore, consider that Table 14(q) should be deleted.</p>	14(p) environmental flow regime are necessary in light of water quality and quantity data gathered during the intervening period and the directives of the higher order planning instruments applying at the time of such review.
	Table 14(r): Te Ana Wai Environmental Flow and Allocation Regime – AA, AN and BA Permits From 1 January 2025	Support in part	<p>Subject to the submission point relating to the definition of "Pro-rata restriction" above, the Catchment Group supports the environmental flow, allocation and partial restriction regime in Table 14(r), is consistent with the FAWPs recommendations to the OTOP Zone Committee. I/we believe that this proposed regime will:</p> <ul style="list-style-type: none"> • implement Recommendation 5.3.2(l) Table 17 of the OTOP ZIPA; • incentivises the formation and operation of water user groups and therefore, water use efficiency; • assist in achieving the water quality and quantity outcomes of the various higher order planning instruments. 	Subject to the relief sought in relation to the definition of "Pro-rata restriction", retain Table 14(r) as notified.
	Table 14(s): Te Ana Wai Environmental Flow and Allocation Regime – AA, AN and BA Permits From 1 January 2030	Oppose in part	<p>For environmental purposes I understand that it may be appropriate for there to be a move towards pro-rata restrictions applying to AA, AN and BA Permits that authorise abstraction from the Te Ana Wai river, as proposed by Table 14(s). I understand that the FAWP recommended this change to the OTOP Zone Committee in 2018, but on the basis that the change take effect from 2035 (not 2030 as proposed by PC7).</p> <p>I understand that the introduction of pro-rata partial restrictions will adversely impact the viability and/or profitability of farm businesses within the Te Ana Wai catchment, and necessitate changes to existing farm systems/capital infrastructure or the consideration of alternative water supplies to offset expected reductions in reliability. A further five years (beyond that proposed in Table 14(s)) is required to provide affected permit holders with time to adjust to the proposed change. I do not believe this timeframe is unreasonable, particularly as it aligns with the timeframe contemplated for the implementation of the environmental and flow regime proposed by PC7 for the Temuka Freshwater Management Unit in Table 14(l).</p>	Amend to provide for pro-rata restrictions to take effect from 2035 (not 2030 as proposed in the notified version of Table 14(s))
	Table 14(u): Minimum Flow Restrictions in the Opihi Freshwater Management Unit for AN Permits		<p>I am unclear how the 5600l/s allocation for AN and AA surface users has been calculated. This appears to be a 'carry over' from the Opihi River Regional Plan and may not fully account for <u>all</u> AN and AA surface water and stream depleting groundwater takes within the Opihi FMU, especially with the introduction of the new stream depletion methodology. It is essential that this allocation limit is corrected.</p>	(a) Amend the AN allocation limit in Table 14(u) so that it reflects all allocation attributable to AN and AA surface water permits and groundwater permits with a direct or high stream depleting effect.
	Table 14(y): Opihi Freshwater Management Unit BN Permit	Oppose in part	<p>I support the proposed BN environmental flow and allocation regimes for the South Opuha, North Opuha, Upper Opihi and Te Ana Wai rivers contained in Table 14(y), together with the associated partial restriction regimes and Lake Opuha level restrictions. I also support the proposed environmental flow and associated partial restriction regime for the Opihi Mainstem In Table 14(y). These regimes are necessary to off-set the reduced</p>	(a) Amend the BN allocation limit for the Opihi Mainstem in Table 14(y) so that it reflects all allocation attributable to BA and BN surface water permits and groundwater permits with a direct or high stream depleting effect.

	Environmental Flow and Allocation Regimes		<p>reliability of AA, AN and BA permits resulting from increases in applicable minimum flows proposed under PC7, and therefore implement Policy 14.4.6B.</p> <p>I am concerned that the allocation limit for the Ophi Mainstem in Table 14(y) does not fully account for all BA and BN surface water and stream depleting groundwater takes, especially with the introduction of the new stream depletion methodology. It is essential that this allocation limit is corrected.</p>	
--	---	--	---	--

The specific provisions of PC7 that my submission relates to are:		My submission is that:		I seek the following decisions from Environment Canterbury (ECan)
Section & Page Number	Sub-section/ Point	Oppose/ support (in part or full)	Reasons	
Definitions				
14.1A Orari-Temuka-Opihi-Pareora Definitions (pages 125 to 128)	Fairlie Basin High Nitrogen Concentration Area	Oppose	I oppose the spatial extent of the Fairlie Basin High Nitrogen Concentration Area, on the basis that it is not supported by the water quality data referred to in the technical documents supporting PC7.	
	Levels Plain High Nitrogen Concentration Area	Oppose	I oppose the spatial extent of the Levels Plain High Nitrogen Concentration Area, on the basis that it is not supported by the water quality data referred to in the technical documents supporting PC7.	
14.4 Policies				
Nutrient Management (pages 135 – 137)	14.4.19 (Water quality targets in HNCAs)	Oppose in part	While I acknowledge the rationale for a 10 year consent duration (e.g. to fit with plan review cycle) as proposed by Policy 14.4.19, this creates uncertainty at a time when considerable investment is required from farmers. The 10 year consent duration should be a minimum, but able to be extended if there is certainty around water quality improvements.	Amend Policy 14.4.19 so that consents greater than 10 years duration can be granted once the water quality targets are achieved
	14.4.20A	Oppose in part	I strongly support the intention of proposed Policy 14.4.20A to enable farmers to apply for an extension of time to achieve the staged reductions required by Policy 14.4.20(c). However, as notified, Policy 14.4.20A would only enable a request for an extension to be made at the time that an application for land use consent (i.e. consent to farm) was made to ECan. It would be preferable to allow consent holders to request an extension at any time.	Amend Policy 14.4.20A to enable holders of existing land use consents to apply for an extension of time
	14.4.20B	Support	I support the approach taken by Policy 14.4.20B in terms of providing a methodology where the Farm Portal is unable to generate a Baseline GMP Loss Rate or Good Management Practice Loss Rate or the number generated is demonstrated to be erroneous.	Retain Policy 14.4.20B as notified.
	14.4.20C	Oppose in part	While I accept that ECan should have the power to review land use consents for farming activities in the circumstances contemplated by Policy 14.4.20C, I consider that the scope of the consent review should be limited to a review of nutrient discharge allowance conditions.	Amend Policy 14.4.20C so that only the conditions relating to the nutrient discharge allowance can be reviewed.
Timaru Freshwater Management	14.4.41	Support	I support the intent of Policy 14.4.41 which requires % reductions in nitrogen discharge from industrial or trade waste. I believe this is fair and equitable as the burden is shared across both farming and industrial activities.	Retain Policy 14.4.41 as notified.

Unit: Levels Plain HNCA (page 141)				
14.5 Rules				
14.6.4 High Nitrogen Concentration Area Staged Reductions Page (page 173)	Table 14(zc) Staged reductions in nitrogen loss for farming activities in high nitrogen concentration areas	Oppose in part	I support the idea of staged reductions for nitrogen losses in the hot spot areas. Many farmers will be effected by both nitrogen reduction targets and changes to irrigation reliability (changes to minimum flows and stream depletion methodology). When the Zone Committee made the recommendations in the ZIPA time steps where put in placxe that were difficult, but achievable for farmers. But no account was made for farmers effected by changes both nitrogen reduction requirements and changes to irrigation reliability. These farmers will need more time to adjust as they will be effected in many ways. They will need more time for change.	Amend table 14(zc) or relevant Policies or tables to account for individuals effected by both nitrogen reductions and changes effecting irrigation supply. Extend time frames by five years for both from what is stated.

The specific provisions of PC7 that my submission relates to are:		My submission is that:		I/we seek the following decisions from Environment Canterbury (ECan)
Section & Page Number	Sub-section/ Point	Oppose/ support (in part or full)	Reasons	
14.4 Policies				
Opihi Freshwater Management Unit: Surface Water Flows (pages 140-141)	14.4.35	Oppose in part	<p>As an OWL shareholder, I support the intent of Policy 14.4.35, to maintain connectivity and flow variability in the augmented Opuha and Opihi rivers. This aligns with the way OWL has been operating the Opuha dam, and the ethos of the OEFRAG approach to managing the Opihi River over the years, including in particular, during the severe water short years of 2014, 2015 and 2016.</p> <p>I support clause (b) which specifies that the flows at Saleyards bridge should be measured on a 24-hour average with instantaneous variance of not greater than 500l/s below the minimum flow. From an operational point of view this is a practical and efficient approach.</p> <p>In terms of clause (e) relating to fresh management, I understand that the Adaptive Management Working Group (AMWG) have been working to develop an artificial fresh regime to most efficiently manage periphyton and achieve improved environmental outcomes. I support the AMWG's proposals and submission in this regard.</p>	Adopt the decisions sought in the AMWG's submission on PC7 relating to artificial freshes.
	14.4.37 and 14.4.38	Oppose in part	<p>I support the approach adopted by PC7 of enabling the implementation of an alternative management regime for the Opihi River mainstem, which takes into account the available water within the Lake Opuha catchment, through a discharge consent held by the Opuha Dam operator.</p> <p>I am however, very concerned about the implications of clause (b) of Policy 14.4.37 and Policy 14.4.38 for the efficient and effective management of the Opihi River.</p> <p>The requirements of clause (b) that an adaptive management regime (i.e. Level 1 or Level 2 flow regime) could only be entered at the start of a calendar month and must remain in place for the whole month fails to recognise that climatic conditions and water demand can change significantly over a month. These requirements would lead to delayed intervention, which in turn is more likely to lead to a fully drained Lake and associated loss of minimum flow control. For example, if the Level 1 regime thresholds are crossed a day after the first day of the month, Policy 14.4.37(b) would result in a month's delay in moving into a Level 2 regime - a month's delay is considerable.</p> <p>I also believe there is no valid reason to delay exiting a regime until the start of the next calendar month if conditions indicate that abstractions and minimum flows are likely to be able to be met for the upcoming months. This delay could be up to a month, would</p>	<p>Adopt the decisions sought in the AMWG's submission on PC7 relating to Policies 14.4.37 and 14.4.38 to provide for the following:</p> <ul style="list-style-type: none"> • The ability to enter into an adaptive management regime on any day if the requisite thresholds are met; • If an adaptive management regime is entered, the adaptive management regime must apply for a minimum of 14 days; and • The ability to enter into a Level 2 Regime only if a Level 1 Regime has been in place for at least 14 days; • The adaptive management regime "exit" thresholds are the equivalent of the Level 1 and Level 2 Lake level entry thresholds.

			<p>provide no appreciable benefit but would cause unnecessary stress to the Opuha and Opihi river systems and abstractors.</p> <p>I understand that the AMWG have been working to develop an adaptive management regime that is based on being able to enter the regime on any day if the requisite thresholds are met. I also understand the group have been considering an 'exit' strategy – i.e. when an alternative management regime can be lifted. I consider these essential amendments in order to ensure the storage in the Lake Opuha is able to be managed in order to achieve connectivity and variability, and completely support the AMWG in their proposal.</p>	
14.5 Rules				
Augmentation of the main stem of the Opuha and Opihi Rivers (page 155)	14.5.29	Oppose in part	<p>I wish to highlight the crucial role OEFrag has historically had in the management of flow releases from the Opuha Dam. The OEFrag model has been hugely successful in ensuring the effective management of stored water in Lake Opuha during water short periods for the benefit of the Opuha and Opihi river systems and abstractors. This is largely due to the breadth of local knowledge, experience and technical expertise held by its members. I strongly believe that OEFrag should continue to have an advisory role under PC7 on the implementation of an adaptive management regime.</p> <p>I understand that the AMWG are proposing that this advisory role be detailed within an operational management plan that would be submitted by OWL in its application for a discharge consent. This seems a logical and practical way of providing certainty to OEFrag membership, and the wider community, that consultation will occur before any Level 1 or Level 2 regime is implemented.</p>	Adopt the decisions sought in the AMWG's submission on PC7 relating to Policy 14.5.29, to require that an operational management be required as part of a resource consent application that includes details of the matters for consideration and a consultation process with OEFrag to assist in the decision of if and when the Level 1 and Level 2 regimes should be entered into or exited.
14.6 Allocation and Water Quantity Limits				
14.6.2 Environmental Flow and Allocation Regimes	Table 14(v): Minimum Flow Restrictions in the Opihi Freshwater Management Unit for AA and BA Permits (2025)	Oppose in part	<p><u>Adaptive management regime</u></p> <p>I strongly support the inclusion of an adaptive management regime for Opuha and Opihi rivers in PC7 which proposes a tiered approach to environmental flows that would apply according on Lake Opuha levels, snow pack and inflows to Lake Opuha, based on the concepts developed by the AMWG prior to the notification of PC7.</p> <p>I am however, concerned that the proposed adaptive management regime has simply been copied and pasted from an application for a plan change back in 2008, that was drafted by OEFrag. While I appreciate that this '2008 application' would have reflected best knowledge at the time, 11 years on our knowledge and experience has greatly improved, especially in light of the dry period of 2014-16. I understand that the '2008 application' was trialled by OEFrag in 2014/15, but it was ineffective because:</p> <ul style="list-style-type: none"> • The lake level threshold for moving into a Level 1 Regime or Level 2 Regime equates to 50% full, which is too low to make any meaningful impact on Lake storage (i.e. it is too little to late). • The reductions in minimum flows through the Level 1 and Level 2 Regimes would not be enough to make meaningful water savings, for subsequent use for the benefit of the downstream environment and abstractors. 	Delete the partial restriction in Table 14(v) and adopt the decisions sought in the AMWG's submission on PC7 relating to the partial restrictions for AA and BA permits at Saleyards Bridge, which provide for variable monthly restrictions, as detailed in Table 14(v(iii)) of the AMWG's submission.

		<ul style="list-style-type: none"> • The ability to make water savings under a Level 1 Regime between April and August is severely constrained. In this regard it is noted that in 2015, WSD were in place for much of the winter in order to reduce the minimum flows prescribed by the ORRP and improve the likelihood of a full Lake at the start of the 2015/16 season, to meet the needs of the downstream environment and abstractors. <p>I very much doubt that PC7's adaptive management regime would enable the flexibility required for proactive management of available storage in the Lake Opuha catchment. I anticipate that we will just have to resort back to relying on Water Shortage Directions into the future.</p> <p>I understand that the AMWG have identified a set of revisions to PC7 that it believes will achieve the outcomes sought by PC7, which include:</p> <ul style="list-style-type: none"> (a) Amendments to the "full availability" flows proposed in Table 14(v), which <ul style="list-style-type: none"> • Provide more water for the river environment during the summer months (by moving water from the shoulder periods to Jan/Feb); and • Ensure sufficient flows for salmon migration (Mar/Apr) and whitebait migration (particularly Oct) (i.e. flows will be maintained at SYB during these critical periods at greater than 6 cumecs, which prior research has indicated is the flow required to maintain the mouth of the Opihi river open). (b) Amendments to the "Level 1 Restriction" flows proposed in Table 14(v), which also provide more water for the river environment during the summer than PC7 and otherwise respond to changing climatic conditions in the catchment; and (c) Amendments to the "Level 2 Restriction" flows proposed in Table 14(v), to align with PC7's proposed 2022 Opihi mainstem environmental flow requirements for AN permits of 2.6 cumecs at Stage Highway 1 (Table 14(u) and historical IFIM habitat modelling). <p>I support these proposed revisions.</p> <p><u>Partial Restrictions</u> The approach taken to restrictions under PC7 represents a significant change from the present planning and consenting framework under the ORRP. I/we accept that the ORRP regime's 50% restriction when Lake Opuha reached RL375m was too late to make any measurable benefit (i.e. in terms of water savings). However, the approach under PC7 of linking a "Level 1 Restriction" to a flat 50% restriction and a "Level 2 Restriction" to a flat 75% restriction, will have significant consequences for the irrigators. This is too harsh and fails to recognise the benefits of the Opuha Dam which irrigators own and have funded.</p>	
--	--	---	--

		<p>Alternatively, I believe that the restriction regime should recognise the criticalities between river demand and irrigation for different times of the year (i.e. variable monthly restrictions). It should also provide for exemption for AA and BA permit holders in the North Opuha, South Opuha, Upper Opihi and Te Ana Wai Rivers which have lower reliability as a result of tributary-specific environmental flow regimes.</p> <p>I am also very concerned about the implications of the proposed partial restrictions being a daily 24 hour volumetric restrictions. This fails to recognise the operational constraints of the irrigation infrastructure of consent holders. It would also lead to gross inefficiencies in terms of water released from the Dam if, for example, a 50% restriction was in place and shareholders could only irrigate 12 out of the 24 hours. From our experience in the dry period of 2014-16, a restriction regime based on a fortnightly volumetric restriction led to a 'smoother' operation of the dam and greater water efficiency. I am sure that OWL and irrigators could provide the necessary real time information to ECan to provide them comfort from a compliance point of view.</p>	
	<p>Table 14(w): Minimum Flow Restrictions in the Opihi Freshwater Management Unit for AA and BA Permits (2030)</p>	<p>I oppose the minimum flows under "Level 1 Restriction" and "Level 2 Restriction" in Table 14(w) for the reasons addressed above in relation to Table 14(v).</p> <p>I also fundamentally oppose the provision in Table 14(w) for increases in the "full availability" environmental flows beyond those proposed in Table 14(v), which would take effect from 2030. I understand that these increases in "full availability" environmental flows in Table 14(w) are intended to reflect the flow gains in the tributaries (Upper Opihi and Te Ana Wai) from increased minimum flows in 2030. I would argue, however, that this is not hydrologically correct, it has no underlying scientific rationale and does not appear to have been informed by any detailed analysis. As I understand it, the proposed "full availability" environmental flows for 2030 have a number of significant issues:</p> <ul style="list-style-type: none"> • It fails to recognise that the relationship between flows in the tributaries (Upper Opihi and Te Ana Wai rivers) and saleyards bridge is much more complex than the 1:1 ratio assumed in Table 14(w). • It would result in approximately 5.2 million cubic metres (on average per year) of additional water released from Opuha Dam to meet this increased minimum flow, as the AMWG's analysis indicates additional water from the Upper Opihi and Te Ana Wai would only be flowing 1% of the time. The release of this extra water would reduce the availability of stored water volume in Lake Opuha for environmental and irrigation releases by approximately 8% per year on average, which may increase the frequency of water shortages into the future. • the approach raises issues of equity as PC7 does not include a similar increase in the environmental flows for AN Permits. <p>I also understand, from ecological work that the AMWG advisers have undertaken, that for the physical habitat of most native fish species, juvenile brown trout and salmonid spawning, increasing the minimum flows is actually detrimental.</p>	<p>Delete Table 14(w) in its entirety</p>

	Table 14(x): Alternative Management Regime Triggers	Oppose in part	<p>I have concerns about the thresholds proposed in Table (x) and how they may be implemented in the future. As an example, the Lake Level trigger for a level 1 regime is at 50% full. Our experience of 2014/15 is that this is fundamentally flawed and does not provide for early enough intervention. Overall, I believe that the thresholds in PC7 are too conservative to enable the proactive management of flows in the Opihi River.</p> <p>I understand the AMWG have agreed on an alternative set of thresholds for Lake level, snow storage and lake inflows and I support these. The data and knowledge used by the AMWG is the best and most up to date, it would be a shame not to use it.</p>	Delete Table 14(x) and adopt the decisions sought in the AMWG's submission on PC7 relating to the alternative management regime triggers, which presents a revised set of thresholds for lake level, snow storage and lake inflows.
--	---	-------------------	---	---

The specific provisions of PC7 that my submission relates to are:		My submission is that:		I/we seek the following decisions from Environment Canterbury (ECan)
Section & Page Number	Sub-section/ Point	Oppose/ support (in part or full)	Reasons	
14.4 Policies				
Efficient Use of Water	14.4.12	Support in part	I support the exemption in Policy 14.4.12 from the general requirement to restrict volume and/or rate of take when an existing permit is replaced to reflect actual use (as prescribed by Method 1 of Schedule 10, CLWRP) for AA, BA and KIL permits, as permits affiliated to OWL. This is consistent with ZIPA Recommendation 4.9.5(II).	Retain Policy 14.4.12 as notified
Livestock Exclusion from Waterbodies	14.4.16	Oppose in part	Support in part, Policy 14.4.16 (a) makes sense. I oppose policy 14.4.16 (b). It is unclear what the policy is trying to achieve, and what the justification for it is. It is unclear what the Mataitai Protection Zone is, and how the policy will effect it.	Remove policy 14.4.16 (b).
Freshwater Management Unit Specific Policies:				
Opihi Freshwater Management Unit: Surface Water Flows	14.4.40	Oppose in part	I support the principle of global consenting under Policy 14.4.40. However, as notified, the Policy would only enable Scheme-wide global consenting. It may be more appropriate (from an operational and/or management perspective) for global consenting of permits affiliated to OWL on a sub-catchment scale (e.g. for permits to cover all affiliated takes in each of the individual tributaries of the Opihi). PC7 should not foreclose that option.	Amend Policy 14.4.40 to remove reference to the term 'single'.
RULES				