

From: [M & AL Hawkins](#)
To: [Mailroom Mailbox](#)
Subject: Submission for PC 7 - M Hawkins
Date: Tuesday, 10 September 2019 6:54:18 PM

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:

Name: *Mark Hawkins*

Address: *14 Sutherlands Road, RD 13, Pleasant Point 7983*

Contact: *0274 105377*

Email: *m.a.hawkins@farmside.co.nz*

Trade competition statement:

- 1 *Mark Hawkins* could not gain an advantage in trade competition through this submission.

Proposal this submission relates to is:

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

Wish to be Heard:

- 3 *I* wish to be heard in support of this submission.
- 4 *I* would NOT be prepared to consider presenting a joint case with others making similar submissions at the hearing.

Signature

Name



Date: 10 September 2019

Submission

Background

I farm at Sutherlands Farm in Partnership with my wife, a 400ha family farm, employing 2.5 staff + contractors, a well balanced property of river flats and downland approximately 50% irrigated from the Te Ana Wai River.

We emigrated and purchased this farm in 2001, with our young family, then aged 7, 5 and 9 months. We love our farm, with the kids we often swam, played and picniced by the river, if your uprooting your family and moving 12,000km away from family and friends it has to be pretty special. Canterbury's rivers are portrayed as polluted and abused – The Te Ana Wai is not one of them, but we are lumped in and included in the greater zone. (Te Ana Wai has 0.06Mg/L of Nitrate N, very low E Coli and Phosphorus).

My involvement in the consultation process with the OTOP Zonal Committee has been as Chairman of the Te Ana Wai Water User Group, as a member of the Flow and Allocation Working Party (FAWP), as a member of the Te Ana Wai Catchment Group, as a fisherman and user of the Te Ana Wai River, as an irrigator out of the Te Ana Wai River and as a farmer.

We fully engaged with the new regime from the outset, we have spent tens of thousands of dollars on Compliance, on Overseer, on FarmIQ, on seeking Consents and Consultants.

We engaged with Overseer from the outset and have done annually. Despite it being so inaccurate as to be useless as any kind of tool, we engaged to build our knowledge and that in the hope it would in time be beneficial. We purchased FarmIQ as a system to better monitor and record our inputs and outputs to ensure we are farming efficiently.

Overseer does not recognise most of our farming operations, our GPS to ensure accuracy, our variable rate applications of fertiliser and chemicals to ensure efficiency and no over applications, our little and often applications of fertiliser to ensure better plant utilisation of nutrients, our riparian plantings, our plantings parallel to the river as nutrient buffers, our use of plantains to minimise N run off are just a few examples.

We applied for a consent to farm to be legally compliant, but that process has been a joke (four years later) despite me imploring ECAN from the highest level to look into it, (which they did) they simply do not have a system to issue consents where AMF land is involved. We have employed consultants, lawyers and land surveyors to sort this out as well.

I realise that ECAN and this process, actually have little interest in Science, facts or the truth – the outcome has been decided and we are merely pawns participating in a charade to give the process some legitimacy.

Science has been ignored and whilst we and our neighbours have engaged and employed experts, consultants and scientists, ECAN have not entered a rational debate. I am thoroughly disillusioned by the process, which has been disingenuous and ignores the four pillars of ECANs governance.

The lack of acknowledgement of the financial implications of the proposals is catastrophic. The recommendations from the Zonal Committee were made without the Economic report (or Ecological report) they were supposed to receive and we were assured they would be in receipt of before making a decision.

We are well aware that changes need to be made, but changes that have been intergenerational to create also need the same time span to rectify. In the media it has been stated specific time frames of 5-10 years to see benefits, this is clearly political, but in simple

terms if it takes 100 years for ground water to pass through a zone, it will take that long to see change.

Right now I am feeling like a Rhodesian farmer and ECAN is Mugabe. It is entirely possible that a entire region of agriculture will be destroyed due to lack of reason and application of Science. Zimbabwe cannot feed its own people let alone the world. If this process proceeds along the more extreme lines, financially it will be catastrophic, both at the family level but also the regional level – not least to ECAN who's rates take will decrease alongside property values.

1. We are members of the Te Ana Wai (TeNgawai) Water User Group, The TWUG has been actively involved in the Te Ana Wai Catchment Group and more recently the Opihi Flow and Allocation Working Party. TWUG has huge concerns with the flow regime being proposed by the ZIPA for both Steps 1 and 2, given the economic impact and lack of scientific ecological reporting to support such change. This process is meant to be solutions driven, but for this catchment, currently there are no alternative sources of water to overcome the changes by proposed by the ZIPA, such as deep groundwater or large schemes proposed for the area. Therefore any change in flow regimes must take a cautious and conservative approach.
2. This process must consider the environmental, economic, social and cultural impacts of its decisions. So far in the process the focus has been on water quantity and not the economic and social consequences of changes in flow regimes.
3. The TWUG has been part of commissioning an economic study by Justin Geary - B Com (VPM) PG Dip (Rural Business) Rural Business Advisor, NZ Farm Management. This study has shown that any change to the minimum flows for the TWUG will directly cause immediate significant adverse effects on the farming businesses involved with drops in EBIT of 18% - 100%.

This process will make some farms uneconomic. Species that become extinct are those that cannot adapt or evolve. We will evolve and I am confident science will provide with some of the answers, although we cannot use all the tools in the toolbox as we are cannot use GM or GE solutions. But all of this requires time and time especially step 2, is something ECAN is not prepared to give us.

4. The minimum effect of just pro-rata reduction with the existing minimum flow regime, would reduce EBIT/ha by \$525, with an annual effect on the community of \$2.623m rising to \$7.085m per annum with Step 2. The capital depreciation with the ZIPA proposed steps for the Te Ana Wai River on the farms involved, would be between \$4.5m and \$13.6m. The social effect of this is destructive to the families involved and their employees. This is obviously very significant and will wipe out some farming families.

In the media, there is much made of the assistance that is or will be made available to farmers. This is disingenious. It is finance to the consultants etc but not to actual farming operations. If it were grants for winter housing or drainage that would be specific and helpful. But its not, its just rhetoric, so the public think farmers are being helped.

5. TWUG accept that making no change to the current situation is not appropriate nor achieves improvement in sustainable management. As a result, through the Working Party process the group has worked out areas where changes can be made for environmental benefit, without destructive consequences to the irrigators water availability and therefore farming viability. These concepts are summarised below but are still being formalised though the Working party process.
 - Determine Te Ana Wai River variable monthly minimum flows to support fishery requirements during spring and autumn, when demand is less by irrigators. What exactly this should be, is to be finalised through the Working Party process once with the supporting ecological and economic reports.
 - Increase Te Ana Wai River winter minimum flows
 - Maintain Opihi Saleyards Bridge minimum flow regimes (no de-coupling from Opuha Dam)
 - Reduction in allocation through S126 of RMA, reducing allocation of consents not used
 - Stream depleters now going on Te Ana Wai river minimum flow restrictions (current ZIPA recommendation)
 - High flow abstractors (BN) have the block size capped and flow levels on the Te Ana Wai River increased to appropriate ecological level, whilst reducing SH1 flow restriction. This aims to achieve ecological improvement but also improvement in irrigator reliability, so changes must be a package solution.
6. It is expected that these mechanisms above will have significant ecological benefit to the Te Ana Wai River without severe economic consequences to the existing irrigators. Also as a result of these changes being considered, it is essential AA irrigators are allowed to take water into storage, for AA and BN consents. The TWUG realises that a final outcome still needs to be reached on the details and that the solution must be a package where all aspects are considered. It is hoped through the Working Party process, agreement can be reached on all aspects.
7. At this point the summer minimum flows are of most concern for the TWUG, given this is where the greatest economic impact is experienced by the irrigators. At this time the Te Ana Wai River system is naturally low, and often dry in the lower catchment. Whether any increase in the minimum flow regime will actually benefit the instream value is yet to be determined by ecological studies. With no alternative water available, any change in the summer minimum flow will have significant economic consequence.

8. The fact that the TWUG are the only AA consent holders and Shareholders in the Opuha Dam on the Te Ana Wai must also be considered and recognised.
 - Only TWUG are currently governed by minimum flows on the Te Ana Wai.
 - Only the TWUG have invested millions of dollars in Opuha Water shares and on-going annual water charges in OWL.
 - Only the TWUG have their water released from the Opuha Dam to counteract the water take from irrigation.
 - Not only are we paying our way financially but also environmentally as well.
9. The Downlands water supply is taken upstream of the minimum flow site, at a rate of up to 79l/s. At this point, approximately 40l/s of this consent is used. The TWUG are concerned that increasing up to this consented rate will affect water availability and suggest that Timaru District Council should be considering other sources of water that may be available for Timaru. Such as Hunter Downs and Rangitata water.
10. The Te Ana Wai river bed is becoming overgrown with gorse, broome and willow trees. Whilst gorse and brome are gross contributors to ground water nitrification, willow trees are large consumers of water - 450L/day. The depth of the berm and the number of trees indicate huge consumption of water. If the quantities of gorse, broome and willow were addressed, it would have a significant impact on the quantity of water flowing within the catchment. Currently the only solution being considered is increasing the minimum flow for irrigators.
11. The TWUG are proud of the high water quality of the Te Ana Wai river and would continue their highest endeavours to maintain and enhance the water quality. All irrigators complete Overseer and have a FEP in place. Land use consents to farm are in place or in the process of being obtained. The TWUG have always enjoyed a close working relationship with ECAN and pioneered water meters and telemetry, and they wish this to continue to determine solutions for the catchment. Using technology such as Precision Ag we expect to significantly reduce our kgN/ha over time.
12. The impact of this level of minimum flow increased proposed by Table 2, Step 1 and 2 of the proposed ZIPA will have significant implications for the businesses which rely on the irrigation water to operate. While the on farm economic impact is significantly adverse, the flow on effect into the community will also be substantial. As the group have highlighted the current regime in addition with the changes being considered through the Working Party, any solution must be a package to achieve sustainable management – ecological and economic. The current management structure is managing the river well and through two of the driest seasons on record the river maintained its natural characteristics.

13. The FAWP process been an enormously time consuming and costly process, however it is pleasing to see that the Zone Committee has taken on board and included the recommendations by the FAWP in the updated recommendations. This has been determined through a robust process of debating and deliberating over the information available to determine a collective outcome and recommendation.
14. The Te Ana Wai River has been the most debated through this process, evident in that a true pro-rata regime has not been implemented. However, the 50 % restriction regime is considered appropriate for this river, and balances ecological gains with economic impacts. The summer minimum flows are of most concern for the TWUG, given this is where the greatest economic impact is experienced by the irrigators. The ability for A permit shareholders to take water into storage is a key element that is already being implemented in this catchment and must remain within the new plan. With no alternative water available, any change in the summer minimum flow and ability to take A permits into storage, will have significant economic consequences. Furthermore the provision for B high flow water harvesting with increased Te Ana Wai flows, balanced with lower SH1 flows. It must be remembered, that this is a full solution package and all the components are interconnected.
15. It is our view that, given the Zone Committee has taken on board the FAWP recommendations, the environmental, economic, social and cultural impacts have been considered as thoroughly as possible at this time. Although it must be noted that the economic impacts of these flow regimes are still not fully understood as this information has not been provided by Environment Canterbury (ECan). It is on that basis that this recommendation for the Te Ana Wai River must remain in its current format and is the final outcome sought for this catchment.
16. The TWUG support the small amendments that are being recommended by the FAWP. Specifically for the Te Ana Wai this is clarification regarding the AN water user group and correction to the table identifying when non-water user group irrigators commence restriction.
17. The TWUG also has a strong interest in the water quality levels being established. We support the recommendations by Opuha Water Ltd, whereby 4.8.1, Table 1 and the associated wording needs to be amended.
18. It is inappropriate to set a limits on groundwater when there is insufficient data available to determine the current state average. Instead, TWUG suggests Table 1 be divided so that those sites with a known current state average (Geraldine, Opihi, Orari and Pareora (lower)) are tied to the limit specified and those with insufficient data (South Branch Pareora, Taiko Stream, Te Ana Wai, Timaru and Upper Pareora) have monitoring programmes established to ensure current state can be determined and appropriate limits or targets related to the 5.65 mg/l can be set at the next plan

development stage. This would be a limit if the current state is less than 5.65 mg/l or target if it is exceeded.

19. Additionally, in 4.8.1(III)(a), Table 1 and Table 2, in order to be consistent with the NPS-FM, and for clarity, that the word 'attribute' should precede 'state'. Furthermore a distinction needs to be made between long term deterioration and natural variability, therefore should not be just based on 1 year of data but rather looking at longer trends over several years. Hence a 5 year average should be referred to along with the attribute state as per the NPS-FM.
20. The TWUG are likely to implement and use the "Global Water User Group" regime recommended in 4.9.8, but not in its current form, basing this on usage data. It was the understanding that as shareholders in Opuha Dam, there were exemptions for usage given the shares held. It is recommended this is clarified and changed.
21. As the group have highlighted the regime for the Te Ana Wai in the updated recommendations is a solution package to achieve sustainable management – ecological and economic. The TWUG support the recommendations subject to the amendments proposed by the FAWP.

PLAN CHANGE 7 - REASONS FOR SUBMISSION AND DECISIONS SOUGHT BY *Mark Hawkins*

Submission points for Tributary minimum flow regimes

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	
14.1A Orari-Temuka-Opihi-Pareora Definitions (pages 125 to 128)	"Pro Rata Partial Restrictions"	Oppose	<p>In relation to the proposed partial restriction regimes for the Te Ana Wai river 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/we 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	Table 14(m): North Opuha Environmental Flow and Allocation	Support in part	<p>Subject to the submission point relating to the definition of "Pro-rata restriction" above, I/we 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/we believe this proposed regime will:</p> <ul style="list-style-type: none"> implement Recommendation 5.3.2(l) Table 12 of the OTOP ZIPA; 	Subject to the relief sought in relation to the definition of "Pro-rata restriction", retain Table 14(m) as notified.

(pages 166-171)	Regime – AA, AN, BA Permit From 1 January 2025		<ul style="list-style-type: none"> 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. 	
			<ul style="list-style-type: none"> 	
	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 quality 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/we 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/we 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/we 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/we 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		I/we are 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.	(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	I/we 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. OWL also supports the proposed environmental flow and associated partial restriction regime for the Opihi Mainstem in Table 14(y). In OWL’s view, these regimes are necessary to off-set the reduced reliability of AA, AN and BA permits resulting from	(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>increases in applicable minimum flows proposed under PC7, and therefore implement Policy 14.4.6B.</p> <p>OWL is, however, concerned that the allocation limit for the Opihi 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>	
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Submission Points for High Nitrogen Concentration Areas / Nutrient Management

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	
Definitions				
14.1A Orari-Temuka-Opihi-Pareora Definitions (pages 125 to 128)	Fairlie Basin High Nitrogen Concentration Area	Oppose	I/we 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.	<i>Provide a description or map of the spatial extent you propose</i>
	Levels Plain High Nitrogen Concentration Area	Oppose	I/we 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.	<i>Provide a description or map of the spatial extent you propose</i>
14.4 Policies				
Nutrient Management (pages 135 – 137)	14.4.19 (Water quality targets in HNCAs)	Oppose in part	While I/we 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/we 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/we 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/we 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/we 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	14.4.41	Support	I/we support the intent of Policy 14.4.41 which requires % reductions in nitrogen discharge	Retain Policy 14.4.41 as notified.

Freshwater Management Unit: Levels Plain HNCA (page 141)			from industrial or trade waste. I/we believe this is fair and equitable as the burden is shared across both farming and industrial activities.	
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	I/we oppose the % reductions specified in Table 14(zc)....	More accurate application of scientific analysis. Currently we have been “lumped” into a red zone, despite the river from our catchment being very clean (see work by Geg Ryder) The Te Ana Wai has 0.06mg/L N and negligible E Coli and P. We should not be in a red zone

Submission Points for Opihi mainstem flow regime (and dam operation)

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/we 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/we 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/we 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/we 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/we 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/we are, 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/we 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/we 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/we also understand the group have been considering an 'exit' strategy – i.e. when an alternative management regime can be lifted. I/we 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/we 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/we strongly believe that OEFrag should continue to have an advisory role under PC7 on the implementation of an adaptive management regime.</p> <p>I/we 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/we 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 to 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/we are, 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/we 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 we 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. • The ability to make water savings under a Level 1 Regime between April and 	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.

		<p>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> <p>I/we 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/we anticipate that we will just have to resort back to relying on Water Shortage Directions into the future.</p> <p>I/we 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/we 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/we believe that the restriction regime should recognise the criticalities between river demand and irrigation for different times of the year (i.e. variable monthly</p>	
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			<p>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/we are 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/we are 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>	
	Table 14(w): Minimum Flow Restrictions in the Opihi Freshwater Management Unit for AA and BA Permits (2030)		<p>I/we 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/we 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/we 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/we 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/we 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/we 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>	Delete Table 14(w) in its entirety
	Table 14(x): Alternative	Oppose in part	I/we 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	Delete Table 14(x) and adopt the decisions sought in the AMWG's submission on PC7 relating to the alternative management regime

	<p>Management Regime Triggers</p>	<p>at 50% full. Our experience of 2014/15 is that this is fundamentally flawed and does not provide for early enough intervention. Overall, I/we believe that the thresholds in PC7 are too conservative to enable the proactive management of flows in the Opihi River.</p> <p>I/we understand the AMWG have agreed on an alternative set of thresholds for Lake level, snow storage and lake inflows and I/we support these.</p>	<p>triggers, which presents a revised set of thresholds for lake level, snow storage and lake inflows.</p>
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Other submission points relevant to shareholders

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				
Tangata Whenua (page 130 – 132)	14.4.2 -14.4.5	Oppose in part	<p>I/we feel that there needs to be greater clarity/explanation around the term 'culturally significant sites' used in PC7 Policy 14.4.2. At the moment it is unclear whether the 'sites' are those referred to in Policies 14.4.3 – 14.4.5 (i.e. Mataitai protection Zone, wahi tapu, wahi taonga, nohoanga, rock art management zones) or if they are other sites. This needs to be clarified for both the consenting authority and land owners.</p> <p>If sites are not specifically identified it becomes difficult for us, as landowners, to understand how we can avoid or minimise effects of our activities.</p>	Amend Policy 14.4.2 to clarify the intended meaning of "culturally significant sites".
Efficient Use of Water (page 133)	14.4.12 (Replacement consented allocation based on past use)	Support in part	I/we 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
Transfer of Permits (page 134)	14.4.13	Oppose	<p>I/we understand that the primary focus of proposed Policy 14.4.13 is to address the phasing out of over-allocation. However, there is no clear statement within Policy 14.4.13 or PC7 regarding which of the various surface water catchments and groundwater allocation zones within the sub-region that have been assessed by ECan as "over-allocated". It is therefore unclear which surface water catchments and groundwater allocation zones that the directives contained in proposed Policy 14.4.13 will apply to. It is essential that certainty about the sub-region's over-allocated resources be provided in Policy 14.4.13.</p> <p>Importantly, it is my/our understanding that none of the surface water catchments from which water is abstracted under permits affiliated to OWL are over-allocated, and this should be made clear.</p> <p>Furthermore, clause (b) of proposed Policy 14.4.13 does not provide an express exclusion from the requirement to surrender allocation on transfer for water permits affiliated to OWL (i.e. AA, BA and KIL) Permits, as contemplated by ZIPA Recommendation 4.9.3(IV). This needs to be addressed.</p>	<p>Amend Policy 14.4.13 to</p> <ul style="list-style-type: none"> • include specific reference to the surface water catchments and groundwater allocation zones within the sub-zone that were over-allocated as at the notification of PC7. • Clarify the exemption from the requirement to surrender allocation on transfer for water permits affiliated to OWL.
Out of Catchment Water	14.4.14	Oppose in part	The intended meaning and scope of the term "catchment" in Policy 14.4.14 is uncertain. Specifically, it is not clear whether the intention of Policy 14.4.14 is to address water introduced from outside the OTOP sub-zone (which I/we believe is the intent of the Policy)	Amend Policy 14.4.14 so that the term 'catchment' is replaced by 'Orari-Temuka-Opihi-Pareora sub-region'

(page 134)			or, for example, movement of water between the tributary catchments of larger catchments in the OTOP sub-zone. OWL considers Policy 14.4.14 requires amendment to ensure there is greater certainty around the intended scope and application of the Policy.	
Livestock Exclusion from Waterbodies (pages 134 – 135)	14.4.15 (Application of region-wide stock exclusion provisions)	<i>Oppose</i>	<i>Not practicably possible on small streams or rivers. Fencing gets washed away by flooding.</i>	<i>ECAN to pay for all fencing and reinstatement after flood events</i>
	14.4.16 (Protection of papatipu rünanga values)	<i>Oppose</i>	<i>They don't need "special" values, we all share the same values</i>	<i>Remove that clause</i>
Freshwater Management Unit Specific Policies:				
Opihi Freshwater Management Unit: Surface Water Flows (page 141)	14.4.40	Oppose in part	I/we 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				
Take and use of surface water (pages 144/145)	14.5.12 (Transfer of water permits)	Oppose in part	<p>As already addressed earlier in the submission, I/we believe that further certainty is required in PC7 around which of the OTOP sub-region's freshwater resources are over-allocated. This is necessary to provide appropriate guidance around which transfers condition 5(b) of Rule 14.5.12 will apply to.</p> <p>Condition 3 of Rule 14.5.12 does not provide an express exclusion from the required for volume on permits transferred for irrigation be calculated on the basis of past use, as contemplated by ZIPA Recommendation 4.9.3(IV). In addition, condition 5(b) of Rule 14.5.12 does not provide an express exclusion from the requirement to surrender allocation on transfer for water permits affiliated to OWL (i.e. AA, BA and KIL Permits), as also contemplated by ZIPA Recommendation 4.9.3(IV). This express exclusion needs to be made clear in the rules.</p> <p>As an Opuha Water shareholder, I/we believe it is unnecessary to restrict the transfer of permits affiliated to OWL from tributary catchments to the Opuha/Opihi mainstem or Lake Opuha, as done in Rule 14.5.12. Such transfers should be enabled by PC7 as they would assist in taking pressure off the tributary catchments and do not result in any increase in Opihi mainstem allocation (as OWL already releases water to compensate for the effects of such takes on the Opihi mainstem).</p>	<p>Amend Rule 14.5.12 to:</p> <ul style="list-style-type: none"> • Clarify which of the OTOP sub-regions freshwater resources are over-allocated • Clarify the exclusion of OWL shareholders specified in ZIPA recommendations 4.9.3(IV). • Provide for transfers of permits affiliated to OWL from the tributaries to the Opuha/Opihi mainstem and Lake Opuha.
Stock Exclusion from Waterbodies	14.5.25 and 14.5.25A	<i>Oppose</i>	<i>Not practicably possible on small streams or rivers. Fencing gets washed away by flooding.</i>	<i>ECAN to pay for all fencing and reinstatement after flood events</i>

(page 154)				
Transfer of AA and BA Water Permits to a Principal Water Supplier (pages 155-156)	14.5.31 and 14.5.32	Oppose in part	<p>As noted above in relation to Policy 14.4.40, I/we support PC7's framework for global consenting. However, OWL the requirement that a global consent obtained through Rule 14.5.31 must authorise all existing AA and BA permits is unnecessary and problematic.</p> <p>It is also unnecessary for the rule to limit the rate of take to <i>the lesser of current consented instantaneous rates of take or shareholding entitlements with Opuha Water Limited</i>, as proposed under condition 2 of Rule 14.5.31, as this does not recognise the role of carriage water for OWL's sub-scheme consents, which are an essential component of such consents but are not covered by "shared" entitlements or water supply agreements with OWL.</p>	Amend Rules 14.5.31 to delete reference to 'determined as the lesser of current consented instantaneous rates of take or shareholding entitlements with Opuha Water Limited'.