



# SUBMISSION FORM – Proposed Plan Change 7(Water Permits) to the Regional Plan: Water for Otago

Form 5, Clause 6 of Schedule 1, Resource Management Act 1991

Office use only

Full name of submitter: Emma Crutchley .....

Name of organisation (if applicable): Puketoi Farming Company .....

Email: [redacted] .....

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Telephone: [redacted] .....

I wish to be heard in support of my further submission.

If others made a similar submission, I will consider presenting a joint case with them at a hearing. (Delete if you would not consider presenting a joint case)

### Trade competitor's declaration (if applicable)

I could not gain an advantage in trade competition from this submission

I am not directly affected by an effect of the plan change that

- (a) Adversely affects the environment; and
(b) Does not relate to trade competition or the effects of trade competition.

Signature of submitter: ..... Date: .....

(Or person authorised to sign on behalf of person making submission.

Signature not required if you make your submission by electronic means)

Please note that all submissions are made available for public inspection.

### State what your submission relates to and if you support, oppose, or want it amended:

(e.g. support rule 'x', or amend policy 'y')

Amend policy 10A.2.1 b. No increase in area under irrigation if the abstracted area is to be used for irrigation.....

Amend policy 10A.2.1e There is a reduction in the volume of water allocated for abstraction

Amend Rule 10A3.1.1b.i The consent duration sought is no more than 6 years

Amend Rule 10A3.1.1b.iii The consent application demonstrates that the land area under irrigation does not exceed that area irrigated in 2017-18 irrigation season

Amend Rule 10A3.1.1b.iv The rate of take shall be no more than the average maximum rate of take limit recorded in the period 1 July 2012 – 30th June 2017

Amend Rule 10A3.1.1b.iv The volume of water taken shall be no more than the average maximum of the daily volume limit or monthly volume limit etc

Methodology for calculating volume limits, and rate of take.

**State what decision you want the Otago Regional Council to make:**

*(e.g. amend policy 'y' to say....)*

Irrigated area: Any reference or restriction on irrigated area should be removed from Plan Change 7

I want the council to issue these short-term consents with the lowest cost possible, or at the full cost of the ORC using the best information available. Reduction in volume of water allocated for extraction, should be linked to established or future established minimum flows and not done in the absence of minimum flows.

Where minimum flows are established the consenting process should be exempt from plan change 7, these consents should continue under the existing plan.

Rules and methodology for calculating rate of take need removed from Plan Change 7

**Give reasons for the decision you want made:**

*(e.g. I want policy 'y' changed because...)*

I am an irrigator in the Upper Taieri Catchment, we are shareholders in the Maniototo Irrigation Scheme. We are not deemed permit holders, nor do we hold any consents expiring before 2025, however I am gravely concerned for the precedent set by the proposed rules and regulations

Irrigated area:

Limiting the size of irrigated area discourages irrigators from using water efficiently. This is because the same amount of water can be spread over a greater area of land with better infrastructure (modern centre pivot irrigators) and/or storage. There are significant environmental, economic and social gains to be made from encouraging this.

On our farm Puketoi station we are fully developed to modern spray systems, this has meant that in the past 20 years we have increased our irrigated area by 100 ha (350-450 ha). We have been able to do this because our irrigation company realised that to incentivise the shift from traditional border dyke flood irrigation, to more modern and efficient spray systems water shares should not be tied to an area of land.

Through this process we have gained environmental efficiencies by reducing run off to our wetland areas, run off is known to be high in *E. coli*. When our last block of boarder dyke irrigation was converted to centre pivot irrigation in 2015 we reduced our kg N lost per ha from over 20 units to around 5 units on that block of land.

We have gained economic efficiencies by increasing Dry matter production from 8-10 tDM/ha (per annum) to 12-15 tDM/ha on existing area irrigated. On the extra area that is now irrigated we measure an increase from 3-6 tDM/season to 12-15t DM/season. This means we can reliably finish all lambs and cattle born on our property and extra store stock. Social gains from this are that we now employ 1.5 extra labour units compared to 10 years previous and employ local contractors and casual staff, adding to an already vibrant healthy rural community.

It is worth noting this is a much more efficient system with lambs reaching kill weight quicker. Outputs are higher meaning our carbon footprint is reduced per kg of lamb produced. If irrigated area was tied to water shares, it would have diminished the incentive for us to upgrade these systems which have had a clear environmental, economic and social gains.

Minimum Flows

The Upper Taieri catchment is protected by 5 minimum flows, resource consents for takes upstream of a minimum flow point include conditions that users can not take water once levels drop below the downstream minimum flow. These flows were set through a rigorous community consultation process to allow for aquatic ecosystems and natural character values and allow for the sustainable taking of water (Otago Regional Council, 2015). Sub catchments within the Upper Taieri also work to maintain residual flows (established through a similar process) on smaller rivers such as the Kyeburn.

The Kyeburn Catchment (an Upper Taieri Subcatchment) traditionally had a very high number of deemed permits and the river would often run dry. These farmers relinquished these deemed permits and priority rights to allow for

a modern flow sharing scheme where they work together to share flows as they decrease. They maintain a residual flow and the established Tiroiti minimum flow on the Taieri. This creates a win win where social, environmental and economic values are considered to achieve best use.

Establishing residual flows and minimum flows has meant that land owners are working together to maintain residual and minimum flows. This approach means that each water user can safely leave water in the river for others to use, knowing that the courtesy will be reciprocated, reducing competition between users and 'Tragedy of the commons'.

I believe that what has been achieved in the Upper Taieri catchment is exceptional, but the precedent set by Plan change 7 will alienate rural communities from stakeholder groups who will resort to an adversarial process at high cost, and everyone loses.

For this reason, I believe consents should be rolled over with minimal cost to landowners in catchments where residual flows are not set. Responsibility for lack of minimum flows in catchments such as the Manuherikia lies solely with the Otago Regional Council so irrigators should not be penalised. Following this the ORC should be encouraging group allocation and flow sharing to allow win wins for environmental, economic and social values.

#### Rules and Methodology for rate and volume of take

Plan Change 7 reduces the allocation of water available for extraction with no evidence of efficiency gains. It is careless of a regional council to propose policy with this effect that could seriously impact the health and wellbeing of rural communities.

Water is most valuable to an irrigator when it is scarce. The methodology for calculating water indicates it will be reduced annually (10A.4.1 (6)) Some irrigation seasons are wetter than others so an allocation of water may not be used. If the abstraction in a wet year is lower than usual, that average will mean that the allocation of water is reduced over time.

With this methodology the incentive for the irrigator, is to take all his allocation every single season, so it is not diminished. This is a use or lose mentality, where even in a wet year when soils are saturated the full allocation will likely be applied. This has the potential to create negative environmental outcomes.

Like us, irrigators will develop infrastructure using scientific data (aqualink reports) to use their set allocation with around 95-100% security. This means they will be able to fully irrigate that developed area gaining benefit from the expense. Below 95% security supply for existing infrastructure is unreliable. When this supply is diminished year by year irrigators will get to the point where existing infrastructure is no longer viable because it can not be used when it is most valuable.

In the flipside, for an irrigator who has not yet developed to efficient irrigation systems, there is no incentive to do so because the cost of the infrastructure is too great for an unreliable water supply, so the incentive is to continue inefficient methods such as flood. This creates inefficiencies and means that opportunities for positive environmental, economic and social outcomes are lost.

For our property, reducing water security, would decrease the number of lambs finished each year, reducing output and inefficiencies around GHG produced per kg of meat produced, the opposite of what has been achieved in the past 10-15 years.

The best way to create win wins for environmental, economic and social values is collaboration between stakeholders and science to create minimum flows, then it will be transparent how much water is available, irrigators can then plan for storage requirements to cover shortfalls. Following this irrigators can work together to share water available leaving enough behind to meet residual flow and minimum flow requirements.

#### Conclusions

The pathway implied by policies, rules and methodology in Plan Change 7 sends Otago down an adversarial pathway at high cost to all stakeholder groups. It will be more costly for the Otago Regional Council as they will somehow have to enforce all these rules. Costs of compliance will be passed on to irrigators along with costs created by diminishing water allocation without scientific data or economic impact reports. It alienates rural communities who often have a better understanding of how to achieve positive environmental and social outcomes than those employed to make the rules. I am gravely concerned for the health and well being of rural communities if Plan Change 7 is implemented.

**Please attach any additional information.**

**SUBMISSIONS MUST BE RECEIVED BY 5.00 PM ON Monday 4 May 2020**

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Private Bag 1954  
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Email to [policy@orc.govt.nz](mailto:policy@orc.govt.nz)

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**Please note:**

Please note that your submission (or part of your submission) may be struck out if the authority is satisfied that at least 1 of the following applies to the submission (or part of the submission):

- it is frivolous or vexatious:
- it discloses no reasonable or relevant case:
- it would be an abuse of the hearing process to allow the submission (or the part) to be taken further:
- it contains offensive language:
- it is supported only by material that purports to be independent expert evidence but has been prepared by a person who is not independent or who does not have sufficient specialised knowledge or skill to give expert advice on the matter.