BEFORE THE OTAGO REGIONAL COUNCIL

IN THE MATTER of the Resource Management Act 1991 ("the Act")

AND

IN THE MATTER Proposed Plan Change 5A:

Presented by Bruce Jolly

I am here for the sole purpose to disagree with most of the conclusions and recommendations that are currently proposed in Plan Change 5A. And the undue hardship that my family and business will suffer if it goes through as currently proposed.

I am a committee member of the Lindis Catchment Group.

I have lived and worked beside the Lindis River all my life. As a child and teenager growing up beside the river it was part of my everyday life. From the water we drank to the swimming and hunting of ducks, rabbits and eels. A big part of summer holidays was helping my father with the irrigating and socialising with the summer campers that would swell the valley population for a few weeks. They came for the hot dry weather and the child friendly low flow river.

My family and I farm in the lower part of the Ardgour Valley.
I am the 4th generation of my family to be using water from the Lindis Catchment for irrigation. The amount of water used on our property has not increased since 1929. Over those years we have built up knowledge and systems to have a robust farming system that can manage the very adverse conditions we face most of the time. Frequent droughts, hot summers, rabbit plagues and long cold winters and, not unique to us, very volatile market forces.
Irrigation is our main weapon in buffering all of those and is the main component of reducing our risk. It gives us resilient and keeps us in business.

The farm is 3500ha going from the valley floor to the top of the Dunstan Range with most having a northerly aspect. It has all day sun and is exposed to the dominant, prevailing nor wester. It is one of the most dry and rabbit prone properties in the country.

We currently irrigate 142 ha with the 63 l/s water from the Lindis Irrigation Company and a further 25 ha from Shepherds Creek a tributary of the Lindis River. Most of this is by pivot irrigators. There is some still done with flood irrigation on the shoulders of the season when demand is below 100% for the pivots, and these areas may only get 2 or 3 passes of water each season. This flood area is planted in drought surviving pastures like Lucerne so it can quickly respond to irrigation or rain.

Although the irrigated area is a small percentage of the total farm it is what makes the difference from a profit and a loss in a lot of years. It smooths out and gives us options when we are faced with one or all those adversities. It means we can guarantee the making of winter supplements in a drought, not sell our lambs in a falling market, and take animals off hill blocks while we do a 1080 poison to control rabbits. It has enabled us to get stock to heavier weights.

It is in the driest of years that all these risks are highest and that the irrigation is most important and this is also when the river has the lowest of flows. We can manage days with restrictions or no water but not weeks.
Irrigation is the economic driver of the property.
It adds value to the dryland by reducing the associated risks.

For the past 10 years I have been investigating my irrigation options knowing that there would be a minimum flow set on the Lindis and that we would have to change to more efficient use of that water when the deemed permits expire. There was the possibility of water from the Clutha with the early possibilities from Tarras Water Limited.

I started looking at on farm water storage sites. I identified 4 sites to investigate further and engaged consulting engineer David Hamilton. After his work it was narrowed down to 2 sites that we did more surveys and geological study on. The outcome of that work was that we would not be able to build dam walls higher than 5 meters using local material because of the nature of the clays and that there was a likelihood of a need to use a plastic liner for the same reason. The outcome of this was we were going to be limited to mostly within irrigation season storage of a limited number of days. This would not really be large enough to be considered for large volume winter water harvesting. The dam sites are at a higher elevation and were isolated from the existing irrigation and electrical infra structure. I would imagine the majority of the catchment is going to have the same constraints because of the nature of the geology and power network.

I also investigated the various types of spray irrigation.
Pivot irrigators came out on top when looking at different efficiencies. Water use and energy use, and consistently even water applications. Low repairs and maintenance, very low labour requirements and very capital efficient when doing a full circle are a priority and not so well suited to smaller areas and rolling terrain.
The most critical difference with pivots is that they need to put water on the land about every 2 days during summer if there is no rain. Typically you would have it design to be able to put on 10 - 12mm at each pass and the pass to take 2 days and if you get behind with the applications you cannot catch up until there is a significant rain event. They require a very reliable water supply.
When looking at replacing my existing border dyke with pivots there was going to be about $2500/ha additional work to remove the old infra structure of the borders and races and move the fences and old stock water system to fit the pivot layout.
So changing existing irrigation is considerably more expensive than a green field development (land that has never had irrigation development).

By the time the Tarras Water Limited prospectus had failed in June 2013 I had completed a lot of investigations on the feasibility of irrigation for our family farm.

At this time the ORC had started its community consultation and had come back to the community indicating if Tarras Water did not go ahead the minimum flow recommendation they would be putting forward would be 450 l/s. Then in April 2014 they released their original Section 32 report with all their evidence in support of the 450 l/s recommendation. Some areas of the report were lacking- mainly to do with the economic and social impact. The community was encouraging them to do this work as it was required of them under the RMA. It would strengthen the position to retain the original section 32 report if they were done to a high standard.

It was on the basis of this knowledge I started planning and implementing my path to more efficient irrigation to be prepared for the looming 2021 deemed permit expiry.
I completed stage 1 of my development in November 2014 but could not continue due to the districts power supply and infra structure being inadequate for the next stage which was to

pump water to one of the dam sites. By late October 2015 the dam was built and the electrical infrastructure was installed and upgraded and all the irrigators were commissioned. The design and build was all based around a minimum flow of 450 l/s and with the dam a 95% reliability factor for all pivot irrigated land. All the water for this stage was being supplied by the Lindis Irrigation Company. Since then another dam has been built and it collects water all year round from the Shepherds Creek consent.

It was only in June of 2015 ORC replaced the original section 32 report. It seems to have lost all the science and relied more on anecdotal observation and they moved the recommendation out to 750 l/s and primary allocation to 1000 l/s

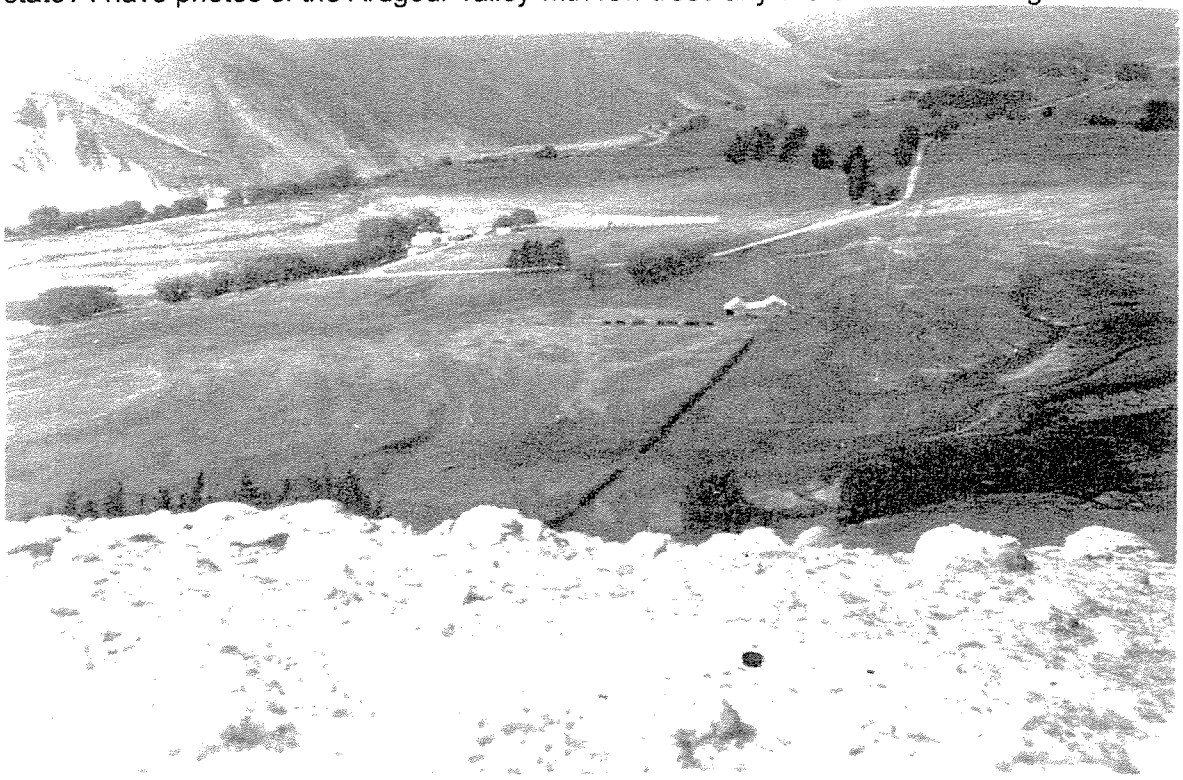
Both these recommendations will have a devastating consequence on my family business. The 750 l/s is removing most of the reliable water that our high capital highly efficient irrigation requires. And the 1000 l/s primary allocation will most likely halve my allocation of water from the Lindis if it is done on a pro rata basis over the whole catchment.
Most of the irrigation infrastructure will become redundant with not enough water to operate it and so will fail to generate an income to repay the borrowings. This would be a very severe consequence to face after being proactive about getting ready for the 2021 Deemed Permit renewal.

I am sure the ORC have overestimated the gains from the catchment converting to efficient irrigation as there is quite a substantial area already converted. It seems to have forgotten it really can only be converted with the reliable water portion. They have not redone their calculations from when they were recommending 450 l/s.
The primary allocation has to be over 1900 l/s. The level this is set at affects the irrigator's ability to take water for short term storage to improve their reliability.

I personally believe the ORC has been negligent in the quality and omissions of information. The water users have been forced to engage at considerable expense extensive expert witnesses to put up quality information that should have been done by the ORC in the first instance as part of the due process.
ORC have had a very narrow focus and have rebuffed any attempt to look at alternatives to just minimum flow and enabling transition policies. Progressing through this process the ORC has proved to be quite dysfunctional with no leadership. If this is their best then Plan Changes are going to be a battleground with challenges every step of the way.
While doing their public consultation there was a directive given in January 2015 by the Chairman and CEO to ORC councillors and staff to stop having communications with Tarras Farmers. Not a great way to run public consultation to stop those that you are not in agreement with from having any input.
I cannot see how they will manage the pressures come the Deemed Permit renewals time in 2021. They have an opportunity now with all the stakeholders in the room to come up with enabling policies so the deemed permit renewal at least in the Lindis River can progress smoothly without the stakeholders having to go back to the table in 2021 to do all this again permit by permit and draw the process out for more years. Not a great outcome for any of the stakeholders.

Fish and Game Council and Clutha fisheries Trust want the river to be improved from a good spawning ground to an excellent one. Yet they have not shown any evidence that Lake Dunstan or the Clutha River is deficient in trout stock. By their own expert evidence the Clutha Fisheries Trust stated that they received $2.7 million from the Electricity Corporation for the purpose of building a hatchery to stock Lake Dunstan and the Upper Clutha. The Hatchery has never been built so the trout numbers over the last 30 year must have been satisfactory to them to date. Either that or they have not been fulfilling their primary objective, "To establish, maintain and enhance primarily the sports fisheries values"

They also refer to the rivers Natural Character. Are trout really part of the Natural Character? Irrigation on the Lindis River predates the introduction of trout. Is it also part of its Natural Character?
How long does a change to something need to take place before it is considered natural state? I have photos of the Ardgour valley with few trees anywhere with less along the river.



Relatively tree less Lindis River 1956

Fish and Game Council make out shade, pools and undercut banks are a natural state of the river. But before trees it was a shallow relatively wide braided river right down the Ardgour valley continually changing course after each flood and new gravel deposit. Trees are only a recent addition building up over about 60years.

In Summary
The recommended Minimum Flow of 750 l/s and a Primary allocation of 1000 l/s would be unreasonably harsh and have far reaching consequences for my family and Business.
I would like to see the Minimum Flow of 450 l/s and a primary allocation of 1900 l/s.
At these levels I think the balance is right between the environmental gains and the economic and social impact. Moving from no Minimum Flow to 450 l/s will still have a significant financial implication and get support from the banks to get us through the huge changes that will have to take place. The bank support will not happen if there is virtually no reliable water left for the irrigators.
All the investment is about reliable water.

There has to be enabling transition policies so the transition from Deemed permits to new consents can happen smoothly and not drawn out for many years leaving everybody with uncertainties and delays.
Drawing out the process may be the best option for some farmers if the Minimum flow is set to high and the primary allocation is too low as we will be contesting each other's individual consent renewals as to who is more eligible for the limited primary allocation. While this is

happening we will be able to continue to take water as we have been until all catchment consents are settled and then and only then the minimum flow can be enforced. I suspect this could be drawn out to go way past 2026 without much effort if farm viability is at stake.