From: Meadowvale Limited

To: Plan Hearings

 Subject:
 Re: PC7 Submitter No.PC&-410

 Date:
 Monday, 20 July 2020 4:35:37 pm

Kia ora Tavisha,

Apology for the confusion. I can confirm the evidence in chief is in support of the submission under my name - Submitter PC7-410.

Nga mihi nui Tom

.

## Sent from my iPhone

On 20/07/2020, at 3:28 PM, Plan Hearings planhearings@ecan.govt.nz> wrote:

Kia ora Tom,

Thank you for providing this evidence to us.

Would you mind confirming whether this evidence in chief is in support of the submission under your name – Submitter PC7-410, whether it is on behalf of Opuha Water Limited – Submitter PC7-381, or whether it is intended to be on behalf of both yourself and Opuha Water Limited.

Nga mihi nui

Tavisha

From: Meadowvale Limited <meadowvale.limited@xtra.co.nz>

Sent: Friday, 17 July 2020 3:59 pm

**To:** Plan Hearings <planhearings@ecan.govt.nz>

Subject: PC7 Submitter No.PC&-410

Kia ora

Please find my evidence for PC7. I will also drop three copies of the book "A Dream Fulfilled - The Story of the Opuha Dam" as part of my evidence to the office of Environment Canterbury in Timaru.

Nga mihi nui

Tom Lambie

#### **BEFORE INDEPENDANT HEARING COMMISSIONERS**

### APPOINTED BY THE CANTERBURY REGIONAL COUNCIL

**UNDER:** the Resource Management Act 1991

**IN THE MATTER OF:** Proposed Plan Change 7 to the Canterbury Land

and Water Regional Plan – Section 14: Orari-

Temuka-Opihi-Pareora

\_\_\_\_\_

# STATEMENT OF EVIDENCE OF TOM LAMBIE ON BEHALF OF OPUHA WATER LIMITED (SUBMITTER NO. PC7-410)

Dated: 17 July 2020

#### INTRODUCTION

- 1. My name is Tom Lambie and I have farmed in Totara Valley Pleasant Point since 1982. In my previous submission I referred to my farming background. It started in the horrendous 1980's decade of economic upheaval, low farm gate prices, high interest rates and unemployment in our district approaching 15%. My saying at the time was "Pleasant Point is a great place to live if you have a job".
- 2. Nearly thirty years later for different reasons we are facing economic upheaval again because of Covid-19. However I am proud to say that because we have built a strong resilient community with the Opuha Dam at the very heart of the community I say with confidence "Pleasant Point is a great place to live because you have a job".
- 3. On top of that for thirty years those involve in the Opuha Dam have been working collaboratively as a community to achieve multiple goals to enhance the very fabric of life in South Canterbury.

#### THE SUCCESS OF THE OPUHA DAM

- 4. The goals were and have been achieved:-
- 5. Guaranteed water for the Timaru District. Prior to the dam the Timaru District Council was very water short. Annual restrictions threatened existing businesses in the Washdyke part of the city and even threatened the closure of the Smithfield Meat Processing Works. Today that facility is expanding with high value products and the greater Washdyke area is now home to more than 2000 jobs, the majority based on processing high value produce for farm land and particularly from reliably irrigated land. Many other businesses are there because we have the wealth creation that underpins the spending within our community.
- 6. A key to the success of the Opuha Dam and our place in the community is the release of minimum flows in the Opihi River. I made reference in my last submission of the book "A DREAM FULFILLED The Story of the Opuha Dam". I have attached 3 copies of this book to my evidence. It tells the story of the anguish of the river and the community who live by it. The early 1980's saw the introduction of the original Opihi River Management Plan with the first environmental low flow irrigation restrictions. As the plan was implemented we faced two summers where there was 100% irrigation restriction for three months from January to March and still the river ran dry. Our Canterbury coastal rivers cease to flow when there is no rainfall. Our

- financial viability on farm and flow through to the community was left in tatters and Fish & Game spent all there time salvaging fish.
- 7. Our community solution, through the Opihi Environment Enhancement Society after many false starts, was the Opuha Dam. From the very start environmental flows for the health of the river was at the forefront of our planning. As an excellent example of everyone sitting round the table those environmental flows were improved. The original suggestion was a 6 cumec minimum flow for every month. It became very clear for native and exotic fish passage to the sea that variable flows, with peak environmental releases in the spring and autumn, was what was need and it was implemented. After the dam was built minimum flows on the tributaries were negotiated through the planning and consenting process and have been in place since the early 2000's. As part of that process but not in any plans was the commitment of the Opuha Dam to prevent any new shares being sold to above dam tributaries and that there would be no trade between tributary systems, capping take from the North and South Opuha, Opihi and the Te Ana Wai. This is another example of the community working together for long term outcomes.
- 8. With Arowhenua Marae the dam has an elver ladder facilitating the passage of young eels and on land owned by the Opuha Dam underneath the lake OWL has banned commercial eeling in the lake and is working with Arowhenua on a trap and transfer practice to get mature eels back to the sea at the right time for breeding.
- 9. One of the reasons the dam was able to be built was the involvement of Alpine Energy and the generation of electricity. Smart generation design and the downstream weir have meant optimal electricity can be generated and timed to provide a valuable electricity resource from the release of water for the environment and irrigation.
- 10. Irrigation for farmland was a significant driver for the community outcomes. Water availability pre-storage was surface flows or river connected and with the realisation minimum flows were required irrigation had become unreliable. It is a miracle the Opuha Dam ever happened as farmers, despite only being required to provide \$62.50 capital to help build the scheme, were so traumatised by poor agricultural prices, drought and adverse events like the big snow of 1992 that a quarter of the shares were not taken up because of the \$62.50 water charge. Please read the book and the amazing people who helped us overcome that hurdle. The Opuha Dam Scheme is also unique in that it is not concentrated in one area. It covers different

parts of the catchment both below and above that would not have been possible without the dam.

- 11. I am pleased to say 100% of the shares were eventually taken up and we now have a resilient, sustainable agricultural community producing a range of high quality food and fibre, supplying the domestic and international markets. Environmental awareness is seeing significant improvements to on-farm practice with the definition and implementation of good farm management practices and beyond. Critical to achieving those improved practices often requires significant capital investment in things like irrigation system improvements. Profitable farms within the variables of food and fibre prices, but stable and reliable high quality produce, allows for that investment.
- 12. Investment has also been made at the Opuha Dam downstream weir to help environmental outcomes. Water quality outcomes below the Opuha Dam downstream weir due to the controlled steady flow are at times poor. With the help of the community and expert advice artificial fresh releases have been tested over a number of years. OWL's investment in the upgrade of the spillway gates on the downstream weir will now allow for better controlled artificial fresh releases at the appropriate time to help improve water quality outcomes on the Opuha River below the dam and in the Opihi River below the confluence.
- 13. We also have potentially a unique opportunity in this Covid-19 world we live in. The government has signalled and I fully support an environment enhancement package for riparian management, native planting and biodiversity enhancement. Land owners in a strong financial position can be part of the community response lead by Tangata Whenua for a rapid improvement in waterway and riparian habitat and to create jobs. On our property 6 bat roosts on exotic trees have been identified. Our vision with the help so far from the Department of Conservation and Environment Canterbury officers is to create up to a 7ha native planting on the Totara Valley Creek to create the Bat Roosts of the future and an incredible micro invertebrate food supply.
- 14. The reliable high quality produced on farms underpins the processors I talked about earlier creating downstream jobs. In addition to that, we are privileged to live in an area so expert in the people and organisations that service the rural community. Engineers for manufacturing and repair, transport operators, machinery suppliers, agronomists, electrician, the list go on as we mutually support each other to create jobs and opportunities for on and off farm employment. We have created a resilient

- economy with near full employment. All these wonderful people create the community we live in getting involved in schools, clubs, societies and organisations that create the balance so required in people's lives.
- 15. The last area has been the creation of recreational opportunities. The desire to see enhanced and sustained environment flows for native and exotic aquatic species has been achieved. The Opuha Dam has created a reliable river flow in the main stem. As you drive north or south of Timaru in a low rainfall conditions at any time of the year the drive is characterised by crossing bridges on State Highway 1 over coastal rivers with dry riverbeds despite 100% irrigation restrictions. This is not the case with the Opihi.
- 16. The community through the Opuha Dam has also created Lake Opuha. It is a tremendous and highly used and regarded recreational facility. The community enjoy fishing, boating, swimming and a wonderful environment beside the lake to relax. Rowers in particular use the facility to train for local regional and national events. They were a group hard hit in the 2014/15 season when the lake emptied as they have very limited alternative training facilities.

#### The 2014-16 WATER SHORT PERIOD

- 17. A key to the success of the collaborative and adaptive management of the Opuha Dam over the last 20 plus years has been the Opuha Environmental Flow Release Advisory Group (OEFRAG). It originally was meant to advise only at the change of environmental flows between months. However in a collaborative nature it came together when we experienced some dry autumns. The restrictions in the Opihi River Regional Plan basically emptied the dam before meaning full irrigation restrictions come on. In those years the main thing that would have been compromised was the supply of water to Timaru. Farmers took water restriction in order to help retain the reliable supply of water to Timaru particular for the food process industries and to maintain the environmental flows and to maintain water in the dam for the following season. There were a lot of learnings without too much pressure from a real water storage crisis. The mechanism for doing this was a Water Storage Direction (WSD). Environment Canterbury provided data and advice and staff took the recommendation of OEFRAG to the Chief Executive Officer (CEO) for signoff.
- 18. That crisis happened in the spring of 2014. We had come out of a wet autumn and we had lowered the lake for flow attenuation purposes but like a lot of Canterbury's

climate when you get to much rain it just stops. There was virtually no snow in the winter and no spring rainfall. The dam only reached 90% full. Enhanced environmental flows requirements in the spring, and early irrigation demand, saw a 30% reduction in the storage capacity of the dam in a six week period. By 1 December with the lake storage at 50% the Opuha Dam, OEFRAG convened and a WSD was imposed that reduced minimum flow requirements to 5 cumecs and irrigation restriction at 75% of allocation. Subsequent WSD had irrigation and environmental flow restrictions but the lack of rain in the catchment meant the dam emptied and ran out of water in late February. Farmers prior to that stopped irrigating in order to leave the last available water in the dam to maintain a connected river flow – this connectivity was achieved. Timaru's water supply was maintained.

- 19. As a group we learned so much from that experience. OEFRAG worked together and miraculously we almost had a full storage dam in the spring of 2015. Again very low snow pack and very low spring rainfall saw the dam level falling. However OEFRAG identified that putting on early irrigation restrictions and lowering the peak environmental flows we could keep storage in the dam to meet the needs of the entire community over the whole season. It was a very successful strategy and the crisis was over with significant rain in January.
- 20. An innovative and much more water efficient way for the irrigation restrictions were introduced. Unlike a run of river scheme when you are waiting for the flows to drop, with a storage facility you know exactly the quantum you have at any given time. With instantaneous telemetry we were able to give certainty of irrigation water allocation over a 14 day period, which was extended to a monthly volume in the 2015/16 season. It gave us certainty and allowed flexibility when water was applied. Today with ground moisture meters we can tailor irrigation application. On any given day your irrigation use could change but over the fortnight/month period you were restricted to whatever the % of your total you were allowed to use. On farm irrigation systems often can only run at one flow rate and longer period allocation allows them to be run at their maximum efficiency.

#### CONCLUSION

21. I have to praise everyone involved in achieving a tremendous community outcome when at times of extremely low inflows, storage could be managed to provide certainty over the entire season. Environment Canterbury staff were outstanding in understanding the 2014-16 situation and taking positive WSD OEFRAG recommendations to the CEO for action and implementation. When the Opihi River Regional Plan relating to the Opuha Dam was put in place we could not have imagined a situation like this and the community response to find a solution.

- 22. The Opuha Dam is absolutely integral to "A Dream Fulfilled" by a community at the depth of its environmental and economic despair in the 1980's and early 1990's. The Opihi River Enhancement Society was the first of its kind in community collaboration to find a solution. Through OEFRAG we have been learning and adapting and enhancing that dream. Environment Canterbury staff in fulfilling and supporting that OEFRAG community involvement through the WSD have been outstanding.
- 23. In summary we have a storage dam that provides enhanced minimum flows, native and exotic aquatic species passage, and water for Timaru for domestic and processing, electricity generation, reliable irrigation to produce high quality food and fibre and amazing recreational opportunities greatly appreciated by the community. It is an environmental enhancement and economic success facilitating the dreams of society. Creating jobs and a vibrant community served by the people who live here. With the governments and Environment Canterbury's commitment for water quality improvement funds for riparian management we can significantly improve the habit of our waterway through native planting for our native aquatic life. The landholders want to work with Tangata Whenua, Environment Canterbury and the wider community to achieve that goal.
- 24. I would sincerely like to thank the Hearing Commissioners for initiating the expert caucusing. We have had thirty years of community collaboration of defining the problem, finding solutions and implementing them for the good of the community and your process follows that exemplar. I wish you well in your deliberations.
- 25. In a Covid-19 world New Zealand is facing the type of national economic crisis we did in the 1980's. A river management plan that understands and implements the importance of reliable water storage is the best way for our local community to achieve resilience for our environmental, social, cultural and economic outcomes.

## **RELIEF SOUGHT**

26. I fully support the relief sought in the submissions, further submissions and evidence lodged by Opuha Water Ltd, the Flow and Allocation Working Party and the Adaptive Management Working Group.