

Tabled at Hearing 17/09/14

My name is Chris Donald from the Lake Ellesmere Dairy Farmers Group. My husband and I have a dairy farm at the edge of the Lake at Lakeside. Like most of our Group we are a family owned and run farm. My husband is fourth generation on our farm, and our son and grandchildren are now on the farm as well.

Those of us farming on the Lake edge are more personally affected by the Lake than anyone else as we live with the Lake every day. It is not just a business, it's our home. We live with the lakeflies, we hunt and fish on the Lake, camp on its edge with our children and grandchildren and swim and play on the water. The health of the Lake is of huge importance to us and to OUR future generations.

Despite what is reported by the media and some experts, dairy farming is not all bad for the environment. I regularly watch the hundreds of birds of all different species that follow our effluent irrigator, eating the worms and insects that we supposedly don't have because we use fertiliser. And I am constantly surprised by all the new species that are appearing that weren't there when I was a child. We can set a flounder net and can catch our limit in a few hours, and consume it without getting sick! The local commercial fisherman tells us that the fishing is the best it's ever been and he can catch his quota in no time. We dig, plant and maintain duck ponds and other areas which provide habitat for all wildlife, and grow pasture which the flocks of Canadian geese, pukekos and swans thrive on!

As smaller family owned dairy farms we are very vulnerable to the financial and management implications of the Plan. We don't have the huge resources of big industrial dairy farms. The fluctuation in dairy payout also has a big effect on us. In a good payout we can afford to do all the improvements and maintenance we want to, but when the payout is low we can only afford to do what is absolutely necessary.

We are also the end of the line as far as water drainage and irrigation is concerned. Everyone else's water drains thru our farms to the Lake, and the quality and quantity of that water is beyond our control. Up until recently the local sewage plant released its end product down one of our local drains into the Lake, and following the earthquake all Halswell's sewage was also released into the Lake for some time. The effects of this on the Lake must have been considerable and long term.

We object to being placed in a special Cultural area. The minute extra consultation and permits are required it creates huge time delays and cost. My husband and I built a new cowshed three years ago. We applied for an effluent permit before construction began on the shed. We had purchased a neighbour's dairy farm and inherited an old and inadequate system so we replaced two old sheds with a modern one with a state of the art effluent system. Our storage exceeded all requirements (20 days) and we also added a tracking and monitoring system to the effluent irrigator. We invested a large amount of money to futureproof our system. Despite this, because of the extra consultation that was required, we are only just getting our permit through at the moment. It has taken three years.

The final requirement for our farm's effluent consent was a new Overseer Baseline Nutrient Budget. Ravensdown has done our Overseer Nutrient Budget's each year as part of Fonterra's requirements for our supply. Last year our nitrate leaching figure came out at 15. We have made vital business decisions (i.e. the purchase of a run off block – again Nutrient Budgeted before purchase and coming out at a figure of 14) based on these figures. The latest Nutrient Budget and the new Baseline Budget have both come out at the same figure. 30! This obviously creates huge management and financial issues for us, and highlights serious problems with the system. We have attached copies. If these Nutrient Budget figures are going to change every time the Overseer model is updated, or a different person is entering data in a different way, we will be chasing a constantly moving target.

If permits are required for drain cleaning it will also create major problems. If there is a weather event and something urgently needs clearing to let flood water off and we have to wait for a permit, it will affect everyone upstream, not just farmers but roads and residential as well. There are also the implications of people not cleaning drains as they don't want to apply for a permit. The same problems for other people with flooding will also occur. We suggest that drainage of water should be in the Farm Environment Plan and part of our general management.

There have been a number of farms put up for sale in the Cultural Landscape Values area over the last couple of years, none of which have had any offers because of the uncertainty surrounding the outcome of Variation 1 of the Plan. Because these farms are in this area it is perceived to be a risk with all the extra scrutiny and consents being required. As a Bank Manager pointed out, if farming becomes a discretionary activity or income, ability to farm and profit are affected this will ultimately affect people's lending ability. At the very least properties in this area will be devalued. We suggest you remove the whole Cultural area around the Lake in this zone, and replace it with areas of significance like the areas where

the rivers i.e. Irwell, Selwyn, Boggy Creek, L1, L2 and Harts Creek run into the Lake and any other areas of cultural importance. Smaller areas which are easier to control and make a better job of protecting this environment.

Riparian planting must be sustainable. It is the size of the riparian strips that is of concern. Planting huge areas is easy. Maintaining them is not. Apart from the financial implications of loss of productive land with wide strips, there is a huge amount of time and effort required to maintain plantings with spraying and weed control. For those of us who spend many hours now dealing with our forefathers plantings of gorse, boxthorn, willows and elderberry, we are more aware than others of the need to be cautious about what is planted and to make it manageable. We have DOC land between our farm and the Lake and they are currently doing a lot of planting. Below is a photo of one of their first plantings from a few years ago, being slowly overcome by gorse, willow and weeds.



These plantings are meant to take care of themselves after the first few years, but the reality is elderberry, gorse and willow can compete with any natives, and the birds attracted to the plantings help spread the weeds. And in a drought when plants die or trees are blown over in a big wind they need replacing.

Irrigation is a major factor for us. Again, contrary to what the media and some Experts will tell you, we do not irrigate willy nilly just for the sake of it. The cost both in electricity and man hours shifting irrigators means you don't ever irrigate unless you have to. And in heavy

soils like we have if we overirrigate it turns to bog anyway. Water consumption varies hugely from year to year because of the variation in the seasons. We would usually average about four or five months a year irrigating, but in a wet year we have irrigated as little as two and in a dry year as many as 9 months. We are unsure, but think it is proposed to take off us any "unused" water on our consents, with the idea of then issuing that to someone else. That then increases the amount of water being used as otherwise that extra water would only be used in times of drought. That will only encourage people to water unnecessarily just so they don't lose water they will need in a drought. Basically it will have the opposite effect intended, and is another example of the uncertainty we face.

Not only do we have to protect the environment but, with the ever increasing world population and need to increase food production to sustain it, we also need to protect our productive farmland. Basically we want a set framework that it is possible for us to work within to achieve both these goals.

28/8/13

Block Nitrogen

OVERSEER

Block name	Total N lost (kg N/yr)	N lost to water (kg N/ha/yr)	N in drainage * (ppm)	N surplus (kg N/ha/yr)	Added N ** (kg N/ha/yr)
Taumutu Sand Loam	843	21	11.2	259	300
Effluent Taitapu SL	581	15	7.2	192	117
Ineffective Area	20	4	NaN	0	0
Taitapu Silt Loam	972	17	8.6	197	200
Waimari Peat Loam	744	16	8.8	198	200
Taitapu Sandy Loam	784	14	7.8	197	200
Effluent Taumutu SL	364	11	6.7	191	117
Forage Crop	35	4	4	253	73
Other farm sources	30				
Whole farm	4374	15			
Less N removed in wetland	0				
Farm output	4374	15			

* Estimated N concentration in drainage water at the bottom of the root zone. Maximum recommended level for drinking water is 11.3 ppm (note that this is not an environmental water quality standard).

** Sum of fertiliser and external factory effluent inputs.

N/A: N in drainage not calculated for easy and steep pastoral blocks, or for tree and shrubs, riparian, wetland or house blocks.

2014

Current farm System Nutrient Loss Indicators

N report

Block N

Block Nitrogen

OVERSEER

Block name	Total N lost (kg N/yr)	N lost to water (kg N/ha/yr)	N in drainage * (ppm)	N surplus (kg N/ha/yr)	Added N ** (kg N/ha/yr)
A pasture #8	98	52	27.7	298	252
F effluent	115	11	8.9	368	347
F pasture	486	8	6.8	281	247
Fodder crop	1207	381	29.8	598	184
K effluent	188	29	18.9	380	347
K pasture	1057	24	15.9	264	252
M effluent	773	26	16.8	342	319
M Kale - Pasture	26	6	4.5	458	168
M Past - Kale	14	3	2.5	294	138
M Support pasture	76	6	4.1	582	168
R pasture	5688	78	44	281	252
W effluent	184	9	7.9	341	319
W pasture	37	7	6.9	270	252
Other farm sources	29				
Whole farm	7997	50			
Less N removed in wetland	0				
Farm output	7997	50			

* Estimated N concentration in drainage water at the bottom of the root zone. Maximum recommended level for drinking water is 11.3 ppm (note that this is not an environmental water quality standard).

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