

**IN THE ENVIRONMENT COURT
CHRISTCHURCH REGISTRY**

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an appeal pursuant to Clause 14 of the Act

BETWEEN **LOWER WAITAKI IRRIGATION COMPANY
LIMITED**

Appellants

AND **OTAGO REGIONAL COUNCIL**

Respondent

**NOTICE OF APPEAL
Dated 4 June 2013**

To The Registrar
Environment Court
Christchurch

1 **LOWER WAITAKI IRRIGATION COMPANY LIMITED (the Appellant)** appeals against part of a decision of the Otago Regional Council on Plan Change 6A (Water Quality) to the Regional Plan (**PC6A**).

2 The Appellant made a submission on that plan change.

3 The Appellant is not a trade competitor for the purposes of Section 308D of the Resource Management Act 1991.

4 The Appellant received notice of the decision on 20 April 2013.

5 The decision was made by the Otago Regional Council.

6 The part of the decision the Appellant is appealing is the decision declining relief sought by the Appellant to the following:

- Policy 7.D.7
- Rule 12.C.1.3

7 The reasons for the appeal are as follows:

Policy 7.D.7

7.1 This policy states that the duration of any resource consent for discharges that breach any relevant Schedule 16 or nitrogen leaching rate limits is not to exceed:

- Two years for discharges from a short-term activity with short term adverse effects;
- Five years for all other discharges where the contaminants in the discharge result from the activities of the applicant.

7.2 The limits referred to in the policy are opposed for all of the reasons set out below in relation to Rule 12.C.1.1. For the same reasons, the policy basis for the short duration consent is opposed.

Rule 12.C.1.3

7.3 The decision of the Hearing Commissioners was lacking in any evidential basis. There is no 'ground-truthed' connection between the nitrogen leaching rate limit and the water quality objective for freshwater waterbodies in this catchment, so as to justify the nitrogen leaching rate for the Waitaki Plains catchment.

7.4 In particular:

- (a) There was no evidence of any degradation in the quality of water in the Lower Waitaki aquifer to refute the evidence brought by the Appellant that the data shows a recent downward trend evident in the groundwater nitrate data;
- (b) There is limited, if any, scope for further intensification of farming in the Waitaki Plains so as to justify the set nitrogen leaching limit.

7.5 The limit is not able to be justified on either a risk or a cost/benefit analysis, and nor is it necessary in order to achieve compliance with water quality objectives of the regional plan or of the NPS;

7.6 The limit as set is not able to be achieved by farmers using border-dyke irrigation in the Waitaki Plains, such that the rule will have the following social and economic impacts:

- (a) Force the end of border-dyke irrigation;

- (b) Force a significant reduction in dairy farm production for all irrigated farming businesses (for border-dyke farming business by approximately 32%);
- (c) Lead to the result that 50% of the current dairy farms will not be bankable;
- (d) Lead to an approximate 41% reduction in border dyke dairy farm land value;
- (e) Lead to a loss (in the order of) \$47m/annum in revenue to dairy farmers on the LWIC scheme;
- (f) Result in a loss of income to the region of \$93-\$140m per annum;
- (g) Lead to significant job losses (approximately 92 dairy farm jobs and another 92 related jobs in the district);
- (h) Force most farmers on the Waitaki Plains to apply for resources consents, with all of the ensuing costs and uncertainty to the outcome, and on-going viability of the farm businesses;

7.7 The Hearing Commissioners ignored evidence brought by the Appellant that:

- (a) From an environmental perspective the concentration of nitrate-N in water rather than the quantity (kg) of N added is the more critical consideration as concentration determines the effect of nitrate-N on the environment;
- (b) That the higher drainage under a borderdyke irrigation system means that concentration of nitrate-N is lower than where spray irrigation systems are used;
- (c) There is no evidence to support the assumption by ORC that extra amounts of fertiliser are applied on the Lower Waitaki Plains for borderdyke in comparison to spray irrigation;
- (d) That the N leaching loading is not likely to increase by the significant margins assumed by the studies undertaken by ORC supporting the set limits;
- (e) The conversion to spray irrigation will result in decrease in the volume of water draining to groundwater, and that decrease may result in unexpected outcome in that with less flushing there will be higher nitrate-N concentrations in the groundwater, even where nitrate-N drainage under borderdyke irrigation exceeds the set limits because it is more diluted than under spray irrigation it is not likely to have a greater effect on nitrate-N concentrations in groundwater;

(f) There is a need for further catchment-wide investigation and analysis before a nitrate-N value is set as a nitrogen leaching rate for the Lower Waitaki Plains area.

7.8 And for all of the other reasons set out in paragraph 3 of the original submission (**attached**).

8 The Appellant seeks the following relief (in the alternative, and in order of preference):

8.1 Delete Policy 7.D.7;

8.2 Delete/amend Rule 12.C.1.3 insofar as it relates to the area contained within the Waitaki Plains as shown on the attached map described as the Nitrogen Tolerant Zone;

8.3 (By way of further plan change or as an outcome of the determination of this appeal) increase the limit for nitrogen leaching rate in respect of discharges in the Waitaki Plains as shown on the map depicting the Nitrogen Tolerant Zone referred to in paragraph 8.1 following the further catchment-wide work identified in paragraph 7.7(f) of this appeal.

9 The following documents are attached to this notice:

9.1 A copy of Lower Waitaki Irrigation Company Limited's submission;

9.2 A copy of the relevant decision (or part of the decision);

9.3 A list of names and addresses of persons to be served with a copy of this notice.

Dated this ^{1st} day of June 2013.



George Latham Berry

Solicitor for Lower Waitaki Irrigation Company Limited

Address for service of Appellant:

Berry & Co
PO Box 10
Oamaru 9400

Attention: George Berry/David Jackson
Email: djackson@berryco.co.nz

Counsel instructed:

Pru Steven
Barrister
PO Box 9344
Christchurch 8149

Phone: 03 343 9834
Email: pru@prusteven.co.nz

ADVICE TO RECIPIENTS OF COPY OF NOTICE

How to become party to proceedings

You may be a party to the appeal if you made a submission or a further submission on the matter of this appeal and you lodge a notice of your wish to be a party to the proceedings (in form 33) with the Environment Court within 15 working days after the period for lodging a notice of appeal ends.

Your right to be a party to the proceedings in the court may be limited by the trade competition provisions in section 274(1) and Part 11A of the Resource Management Act 1991.

You may apply to the Environment Court under section 281 of the Resource Management Act 1991 for a waiver of the above timing or service requirements (see form 38).

How to obtain copies of documents relating to appeal

The copy of this notice served on you does not attach a copy of the documents referred to at paragraph 9. These documents may be obtained, on request, from the appellant.

Advice

If you have any questions about this notice, contact the Environment Court in Auckland, Wellington, or Christchurch.

LIST OF PARTIES TO BE SERVED

Otago Regional Council
Private Bag 1954
Dunedin 9054

And all submitters on matters appealed as per attached schedule

ORC Submitter Nur	Name1	Contact	ContactOrgCo	PostalAddress1	PostalAddress2	PostalAddress	PostalCode
6	Andrew McCurdy			1 Monowai Street	Ravenbourne	Dunedin	9022
39	Hewett Farm Ltd	Rob Hewett		1233 Manuka Gorge Highway	South Otago	Lawrence	9593
45 & 1019	Hopefield Investments Ltd	Clive Cochrane		PO Box 2		Balclutha	
56	Three Creeks Farm Ltd	IM & JA Isbister		63 Ardgowan Road	1 DRD	Oamaru	
57	University of Otago, Department of Zoology	Dr Christoph Matthaei		PO Box 56		Dunedin	9054
58	C P Mulholland			Rapid 969 Ranfurly Patearoa Road	RD4	Central Otago	9398
61	S H Andrews and Sons Ltd	John Andrews		Waipiata	RD3	Ranfurly	
62	Green Party (Dunedin Branch)	Shane Gallagher		shane.montague-gallagher@otago.ac.nz			
64	Providence Farm 2007 Ltd	P L Finlay		15 K RD		Oamaru	9494
65	Gerald Burgess			56 Langridge Rd		Temuka	7985
66	Barry John Burgess			723 Purakaunui Falls Road		Owaka	
69	Peter T Borrie			Posthill	15 K R D	Oamaru	9494
73	Stephen Crawford			126 Lambourne Road	Kilmore Farm, RD4	Balclutha	9274
78	Jeff & Alison Thompson			Whitstone-Five Forks Road	RD 16D	Oamaru	9492
82	Roger Fox			13 DRD		Oamaru	
83	Invernia Holdings Ltd	Russell Hurst		4 K RD		Oamaru	9494
88	Alan L Wilson			120 Waikoata Valley Road		Owaka	
93	A J & T Verbakel			329 State Highway 83		Oamaru	9494
95	Wallace Evan Strachan			15 KRD		Oamaru	9494

96	Trevor Meikle			Carnwath, 406 Devils Bridge Road	2 D RD	Oamaru	9492
98	Val Ridge Farm Ltd	Clayton Buckley		284 Carrs Road		Loburn	
100	Duncan Henderson			Happy Valley Station, 302 Hawksburn Road	RD2 Bannockburn	Cromwell	9384
101	Ross A & Alexa Wallace			182 Beacon Hill Road	Waipahi, RD1	Gore	9771
106 & 1005	Lower Waitaki Irrigation Company	Mr Chris Dennison		3 HRD		Oamaru	9493
115	Elderslie Dairy Farms Limited	Andrew Jeffries		84 Elderslie Road	RD 2C	Oamaru	9491
116	Stewart Morrison			242 Riverside Road	RD1 Inch Clutha Kaitangata		9281
117	Bob Hollamby			5 H RD		Oamaru	9493
119	PGG Wrightson	Neville Langrish		PO Box 24		Oamaru	9444
120	A J & A J Anderson			6A Hart Street	Belleknowes	Dunedin	9011
122 & 1004	Albert McTainsh			Tahakopa Valley Road	RD2	Owaka	9586
125	Finlay Family Trust			185 Gibson Road	15K RD	Oamaru	9494
128	Cath Gilmour			19 Willow Place		Queenstown	9300
131	Grant Bradfield			83 Forsyth Road	2 RD	Owaka	9586
133	The Cow Farm Limited	G Scott		38 Marsh Road	Ettrick RD2	Roxburgh	9572
135	Foxhaven Farms Ltd	Tony Fox		107 Brockmans Rd	Airedale	Oamaru	
139	Clutha Agricultural Development Board	Malcolm Deverson		6 John Street	PO Box 149	Balclutha	
140	Otago Conservation Board	Ainslee Hooper		Box 5244		Dunedin	9058
141	Eloise Neeley			PO Box 137		Balclutha	9240
143	M L & P J Lord Family Trust	Mike Lord		330 Marshall Road	1 RD, Outram	Dunedin	9073

146	Dairy NZ Limited	James Ryan			c/- PO Box 160	Lincoln University		7647
148 & 1062	Glenshee Station Limited (Marks & Mouat)	H G Marks & C D Mouat, P J Newland	c/- Goodman Tavendale Reid		PO Box 442		Christchurch	8140
149 & 1016	Ernslaw One Ltd	Peter Weir			PO Box 36	Tapanui	West Otago	
151	Grant Isbister				4 DRD		Oamaru	
154	Shalloch Farms Ltd	Neil Hamilton			287 Gibson Road	3KRD	Oamaru	9494
155	Corona Farms Ltd	Corrie & Donna Smit			46 Otakiri Road	RD2	Whakatane	3192
156	Andrew & Barbara Richardson				498 McPhersons Rd	RD 2K	Oamaru	
159	Gerard Booth				141 Round Hill Road	RD19D	Oamaru	9492
161	Sam Kane				359 Luggate Tarras Road	RD3	Cromwell	
163	Matuanui Ltd	Nathan & Linda Wilson	Matuanui Farm			RD1	Balclutha	9271
164 & 1029	Strath Taieri Community Board	Barry Williams	c/- Dunedin City Council		PO Box 5045		Dunedin	9058
165	Jim Gibson				15 K RD		Oamaru	9494
185	Windsor Park Dairies Ltd	Callum Kingan			900 Weston Ngapara Road	2CRD	Oamaru	9491
187 & 1060	Alliance Group Limited	John Kyle	Mitchell Partnerships		PO Box 489		Dunedin	9054
190	Bob Kingan				294 Parsons Road	1CRD	Oamaru	9491
191	Grant Ludemann				635 Burnside Road	17DRD	Oamaru	9492
194	Jeremy Wales				PO Box 4		Roxburgh	9441
195	Dairy Holdings Limited	Ben Williams	Chapman Tripp		PO Box 2510		Christchurch	8140
196	Clyde Dairy Farm Ltd	Dave Inder			274 Koau Raod	Paretai RD1	Balclutha	
197 & 1065	Otakou, Kati Huirapa Runaka Puketeraki, Hokonui Runanga	Tim Vial	KTKO Ltd		PO Box 446		Dunedin	9054

202	Irrigation New Zealand Incorporated	Andrew Curtis		6 Sonter Road	Wigram	Christchurch	8042
203 & 1073	NZ Transport Agency	Denise Anderson	MWH NZ Ltd	PO Box 4		Dunedin	9058
207	M C Holland Farming Ltd	Frances Lojkine	MWH NZ Ltd	PO Box 4		Dunedin	9054
211 & 1025	Dunedin City Council	Frances Lojkine	MWH NZ Ltd	PO Box 4		Dunedin	9054
213	Vivienne & Greg Kerr			RD1	Waikouaiti	Otago	9471
214	Willowview Pastures Ltd	Geoff Taylor		304 Kaik Rd	5 H R D	Oamaru	9493
215	Alan Grant Macgregor			159 State Highway 1	1 KR D	Oamaru	
216	Graham Butler			120 Steward Rd		Oamaru	
225	Preserve Our Water Society Inc	Kim Fogelberg & others		35 Loach Road	Hawea Flat RD2	Wanaka	9382
228	John Newlands Farming Company	John Newlands		33 Newlands Road	12A DRD	Oamaru	9492
232	Kawarau Station Limited	Richard John Anderson	Kawarau Station		2 RD	Cromwell	9384
234	Michael O'Connor			66 McKerrow Road	11 ORD	Oamaru	
238 & 1070	Silver Fern Farms Limited	Jo Appleyard/Tania Low	Chapman Tripp	PO Box 2510		Christchurch	
241 & 1068	Fonterra Co-operative Group Limited	Sonia Anderson		Private Bag 92032		Auckland	1142
242	Rod Philip				2 RD	Palmerston	
247	Viewmont Limited	A D Newlands		289 Kauru Hill Road	12 BDRD Maheno	Oamaru	
248	Ravensdown Fertiliser Co-operative Ltd	Chris Hansen	Chris Hansen Consultants Ltd	PO Box 51-282	Tawa	Wellington	5249
249	Sandy Bay Ltd	S B Harrison & J H Weedon		716 Ahuriri Flat Road	Otekura RD1	Balclutha	9271
250	Waihemo Water Catchment Society Inc New Zealand Fertiliser Manufacturers Research Association Inc (Fert Research)	Don McLenaghan			RD3 Dunback	Palmerston	9483
252 & 1010		Greg Sneath	Chris Hansen Consultants Ltd	PO Box 51-282	Tawa	Wellington	5249

255	Queenstown Lakes District Council	Phillip Pannett		10 Gorge Road	Private Bag 50072	Queenstown	
256 & 1015	Rayonier New Zealand Ltd	Kelvin Meredith		PO Box 13 285		Tauranga	3141
259 & 1006	B & J Smith			457 Dunrobin Road	RD14C	Oamaru	9491
261	Bernard Lynch			183 Taieri Rd		Dunedin	9010
262	Ballance Agri-Nutrients Ltd	Nigel Sadler		Private Bag 12503		Tauranga	3143
263 & 1074	DF1 Ltd and DF3 Ltd, being partners of the Dairy Farms Partnership	Robert Enright	DLA Phillips Fox	22nd Floor, DLA Phillips Fox Tower	209 Queen St	Auckland	1010
264	4650 Matarae Station Ltd	William Jones		Sutton Clarkes Junction Road	RD 2	Outram	9074
267 & 1055	Environmental Defence Society	Kelsey Serjeant		PO Box 91736	Victoria Street West	Auckland	1142
268	Colin Scurr	Phil Page / Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
269 & 1032	Horticulture New Zealand	Manager - Resource Management &		PO Box 10 232		Wellington	
270	Marc Schallenberg			58 Gladstone Rd	Dalmore	Dunedin	9010
271 & 1007	Forest and Bird	Sue Maturin		Box 6230		Dunedin	9016
273	Fish and Game (Central South Island)	Zella Smith		PO Box 150		Temuka	7948
275	T M and C M Scurr			Tuohys Gully 2127D	Cardrona	Wanaka 2RD	9382
276	Karl Guy			343 McPhersons Rd, 6H RD		Oamaru	
277	Mark Kingsbury			15 KRD		Oamaru	9494
278 & 1057	Federated Farmers of New Zealand	Matt Harcombe		PO Box 5242		Dunedin	9058
279	Wenita Forest Products	David Cormack		PO Box 341	Mosgiel	Dunedin	
282	Putahi Ngaherehere o Aotearoa Incorporated, Otago/Southland Section	Dr Angus McPherson		C/- PO Box 5837	Moray Place	Dunedin	9058
283 & 1071	City Forests Limited	Peter Oliver		PO Box 210		Dunedin	9054

287	Fish and Game (Otago)	Maree Baker-Galloway / Peter Wilson	Anderson Lloyd	Private Bag 1959		Dunedin	9054
289	Southern Wood Council	Grant Dodson		PO Box 904		Dunedin	9054
290	Waitensea Ltd	Jonathan Davis		12 Clark St	Sumner	Christchurch	8018
291	Beaton Family	Mark Beaton		1388 Berwick Road	1 RD	Outram	9073
292 & 1056	Otago Water Resource Users Group	John Williamson	McKay Law Limited	PO Box 41		Alexandra	9340
296	Janefield Farm	Ian Bathgate		295 Nichols Road, 1 RD		Outram	
297	Clydevale Dairy Farms Ltd	Alan Cubitt		11 Bedford Street	St Clair	Dunedin	9012
298	Greenfield Farming Ltd	Alan Cubitt		11 Bedford Street	St Clair	Dunedin	9012
299	Big River Dairy Limited	Alan Cubitt		11 Bedford Street	St Clair	Dunedin	9012
300	M W Smith			27 McDonalds Road, 4H RD		Oamaru	9493
304	Philip, Heather & Geoff Wilson			13 Wickliffe Street		Mosgiel	9024
305	Andrea Clarke			116 Signal Hill Road	Opoho	Dunedin	9010
306 & 1011	The Director-General of Conservation	Ken Murray	Department of Conservation	PO Box 5244		Dunedin	9016
309	Clutha District Council and Central Otago District Council	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
310 & 1040	RG & SS Burdon, Glendene Ltd	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
311 & 1036	Ben Graham	Phil Page/Bridget Irving	C/- Galloway Cook Allan	PO Box 143		Dunedin	9054
312	Wyllies Crossing Limited	Phil Page/Bridget Irving	C/- Galloway Cook Allan	PO Box 143		Dunedin	9054
313 & 1049	Calder Stewart Industries Limited	Phil Page/Bridget Irving	C/- Galloway Cook Allan	PO Box 143		Dunedin	9054
314 & 1039	David Greer, Greer Farms Partnerships	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
315	D J & J C Andrew & the D J Andrew Family Trust & Partnership	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054

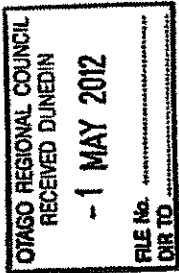
316	Joan Hodge, Homestead Farm Limited	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
317	Rob van Vugt & Sunset Dairy Limited	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
318	G B & R E Gardner Partnership	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9058
319 & 1043	Macraes Community Incorporated	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
320 & 1048	Mainland Poultry Limited	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
321 & 1037	Travis Michelle	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
322	Robert Borst	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
323 & 1038	Dunedin International Airport Limited	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
324	A W B Elliot	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
325	Simon Parks	Phil Page and Bridget Irving	C/- Galloway Cook Allan	PO Box 143		Dunedin	9054
326	Kyeburn Pastoral Company Ltd	Phil Page & Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
328	Peter Rowland				1 CRD	Oamaru	9491
329	Richard Williams			RD 15 K		Oamaru	9494
331	R & M Borrie Ltd	Rogan Borrie		15 KR D		Oamaru	9494
334	Alastair Cocks			Braeburn	RD1	Clinton	9583
1001	Teviotdowns Ltd	Mike Paterson			RD2	Roxburgh	9572
1012	Craiglea Limited	Jan Caunter	Galloway Cook Allan	PO Box 450		Wanaka	9343
1023	Pypers Produce Ltd	Brent Lamb		1035 Branxholme Road	4 RD	Invercargill	
1035	NS Mackenzie	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054
1041	TE & JA Craig	Bridget Irving	Galloway Cook Allan	PO Box 143		Dunedin	9054

1042	DJ & Mrs JC Andrew	Bridget Irving	Galloway Cook Allan	PO Box 143	Dunedin	9054
1044	GV & Mrs RE Gardner	Bridget Irving	Galloway Cook Allan	PO Box 143	Dunedin	9054
1045	AWB Elliot	Bridget Irving	Galloway Cook Allan	PO Box 143	Dunedin	9054
1046	J Hodge	Bridget Irving	Galloway Cook Allan	PO Box 143	Dunedin	9054
1047	RP & RR Van Vught	Bridget Irving	Galloway Cook Allan	PO Box 143	Dunedin	9054
1054	Central Otago Wine Growers Association	Bridget Irving	Galloway Cook Allan	PO Box 143	Dunedin	9054
1063	John Webster		Mitchell & Webster Ltd	Springfield	Oamaru	9492
1064	Peter Mitchell		Mitchell & Webster Ltd	213 Airedale Road	Oamaru	9492
1067	Etrick Fruitgrowers Association Inc	Mark Darling		SH8	Etrick	9538
1069	Nicholas Webster			35 Station Road	Oamaru	9492
260	North Otago Irrigation Company Ltd	Robyn Wells		P O Box 216	Oamaru	9444



SUBMISSION FORM (Print clearly on both sides)
Proposed Plan Change 6A (Water Quality) to the Regional Plan: Water for Otago
 Form 5, Clause 6 of the First Schedule, Resource Management Act 1991.

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 Office use only



Name of submitter: Mr Chris Dennison
 Organisation (if applicable): _____

Lower Waitaki Irrigation Coy
 Postal address: 3 HKP
Oamary

Postcode: 9493
 Telephone: 0274 316 021
 Fax: _____
 Email: Chris.Kay.dennison@extra.co.nz

I wish / do not wish (circle preference) to be heard in support of my submission.
 If others make a similar submission, I will / will not consider presenting jointly with them at a hearing (circle preference).

Signature: CR Date: 23 Apr 2012

(of submitter, or person authorised to sign on behalf of person making submission).

Trade competitor's declaration (if applicable)

I could gain through trade competition from a submission, but my submission is limited to addressing environmental effects directly impacting my business

Signature: _____

Note that all submissions are made available for public inspection.

SUBMISSIONS MUST BE RECEIVED BY 5.00 PM, WEDNESDAY 2 MAY 2012.



Send to:
 Freepost ORC 1722
 Otago Regional Council
 Private Bag 1954
 Dunedin 9054
 please turn over

1	2	3
<p>State what your submission relates to and if you support, oppose or want it amended</p> <p>E.g. amend rule 'y'</p> <p>Rule 12.C.1.2</p>	<p>State what decision you want the Otago Regional Council to make</p> <p>E.g. rule 'y' should say...</p> <p>see attached papers</p>	<p>Give reasons for the decision you want made</p> <p>E.g. I want rule 'y' changed because...</p> <p>See attached Papers</p>

Please add pages as required

**Submission on Proposed plan change 6A (Water Quality) to the
Regional plan : Water for Otago Otago Regional Council.**

1 State what your submission relates to:

The discharge of nitrogen from land to groundwater on the Lower Waitaki plains.

RULE 12 .C.1.2 page 38 proposed plan change.

Support the principal of having an effects based plan.

Frustration of not having access to Overseer© version 6 to establish nutrient losses under existing management or future scenarios.

2 state what decision you want the Regional Council to make
I want the regional council to recognize the Waitaki plains as a special designated area and allow calculated nitrogen leaching to be greater than the proposed 30 kg limit per hectare per year.

If science based evidence proves a need to convert from Border dyke irrigation to spray irrigation then a long timeframe be allowed for this to occur considering the substantial capital investment required and the network upgrade that Lower Waitaki irrigation Co would need to complete to allow this to take place.

Overseer© is not currently configured to cope with arable properties covered by our irrigation scheme.

I want ORC to provide an accurate tool for arable properties to measure losses.

I support the concept of having an effects based plan, this submission relates to the administration of such a plan.

3 Give reasons for the decisions you want made.

Waitaki Plains has a dominant area of approximately 9,000 hectares of Border Dyke irrigation that even under current best practice for this type of irrigation cannot achieve leaching losses of the proposed 30 kg per hectare. The changes in stock carrying capacity would need to be reduced in some circumstances by almost 40 % to achieve this target which would render these farms uneconomic.

Preliminary modelling shows that even spray irrigated farms cannot meet proposed targets

- a) Pre draft consultation meetings stated clearly that leaching losses would be “effects” based on actual groundwater recording ,the use of overseer© as a tool was not discussed. The ramifications of using “overseer©” to model such losses were not communicated to landowners nor were the proposed limits of 30 kg Nitrate per hectare.
- b) Groundwater quality on the Lower Waitaki plains at present is extremely good, Records presented by ORC show that Nitrate levels have plateaued and may be trending downwards even though the area is almost completely intensive dairy or dairy support. Scope for further dairy conversion is limited. More research or study on the current state of the environment on the Lower Waitaki Plains aquifer is needed before N leaching limits can be set with confidence.
- c) The only ORC freshwater source that may be at threat is Welcome Stream. Anecdotal evidence from local landowners shows that stream health has improved over recent years rather than degraded. This stream now supports a juvenile salmon hatchery. The other freshwater source is the Waitaki River administered by E can and an extremely high volume river at 360 cumecs that will not be threatened by local activity in the lower reaches.
- d) Border dyke irrigation gives a dilution effect to water borne nitrates which may be greater in losses per hectare than other farming systems but actual concentration of nitrate in the underlying aquifer may be lower due to assimilation.
- e) Farms on the Waitaki plains are converting to spray irrigation at a steady rate which may allow for lower leaching but this comes at considerable capital cost. An initial estimate to convert all border dykes to spray irrigation is an unconfirmed \$50 Million. This only covers on farm work and not the additional cost to upgrade delivery infrastructure. The original design allowed for some spray irrigation, if all shareholders were to spray irrigate then considerable changes to the network would be required including construction of buffer ponds, piping of laterals and new control gates and takeoff facilities. The design and co ordination of this needs a long lead in time and would involve heavy capital expenditure on the water distribution network.
- f) Conversion to spray irrigation uses much greater energy requirements increasing farmer’s carbon footprint and can

destroy biodiversity created from amenity shelter planted with borderdykes.

- g) The issue of water use efficiency around borderdykes should not be allowed to cloud thinking on this issue, this topic is a different discussion for another authority (E Can).
- h) Forcing farmers on the Lower Waitaki plains to convert from border dyke to spray irrigation in an attempt to meet new standards based on an unproven "overseer© version 6" will face a high level of resistance.
- i) The Waitaki District Council considers the risks of water quality degradation in the future minimal as they have recently shifted the drinking water take for the Lower Waitaki community from the canals of the Lower Waitaki irrigation Co to a groundwater bore.
- j) Overseer© in its current form does not model arable farms with accuracy.
- k) "Overseer© version 6" which will measure nitrate losses is not available at time of lodging this submission which provides a vacuum of information .We cannot accurately model current or future situations in order to comment on proposed levels on Nitrate loss to groundwater.
- l) The policy of this proposed change to have a minimal number of categories throughout Otago of permitted groundwater nitrate losses, namely two being 10 kg and 30 kg poses a heavy burden on parts of the community. Although this simplistic approach reduces the cost of monitoring and compliance for ORC it will have a dramatic effect and a high financial burden on our local community. We are being driven into a restricted regime that appears to be entirely inappropriate for the land use and nature of the high volume aquifer that is present on the Waitaki plains. We cannot support a "one size fits all regime" for N leaching.

Our company and our shareholders look for certainty from this plan which in its current form it cannot deliver.

In summary

Representing 200 shareholders with an interest in 19000 hectares of land covering the lower Waitaki plains and its environs we are anxious that the proposed changes to 6A Water plan are over restrictive.

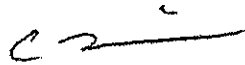
The status quo situation shows the current environment is in good

and improving health, proposed limits relating to N leaching will restrict production severely.

Restrictions on production that show no additional benefit to the environment cannot be supported and will result in substantial community harm.

The material above provides a brief summary of points that I wish to expand upon at the time of the hearing, where possible supporting these points with data and evidence from expert witnesses.

Chris Dennison
Chairman Lower Waitaki irrigation Co



29/4/2012