PROPOSED WAIKATO REGIONAL PLAN CHANGE 1

WAIKATO AND WAIPĀ RIVER CATCHMENTS

Waikato Regional Council
Te Kaunihera ā Rohe o Waikato

Submission form on publicly notified – Proposed Waikato Regional Plan Change 1 – Waikato and Waipā River Catchments.

Important: Save this PDF to your computer before answering. If you edit the original form from this webpage, your changes will not save. Please check or update your software to allow for editing. We recommend Acrobat Reader.

FORM 5 Clause 6 of First Schedule, Resource Management Act 1991

SubForm	PC12016	COVER SHEET	
FOR OFFICE USE ONLY			
		Submission Number	
Entered		Initials	
File Ref		Sheet 1 of	

SUBMISSIONS CAN BE	
Mailed to	Chief Executive, 401 Grey Street, Private Bag 3038, Waikato Mail Centre, Hamilton 3240
Delivered to	Waikato Regional Council, 401 Grey Street, Hamilton East, Hamilton
Faxed to	(07) 859 0998 ***Please Note:*** *if you fax your submission, please post or deliver a copy to one of the above addresses*
Emailed to	healthyrivers@waikatoregion.govt.nz ***Please Note:*** *Submissions received by email must contain full contact details.*
Online at	www.waikatoregion.govt.nz/healthyrivers

We need to receive your submission by 5pm, 8 March 2017.

YOUR NAME AND CONTACT DETAILS

Full name: Peter George Hooker

Full address: 11 Fullerton Road, RD 8, Hamilton

Email: janandpeter@slingshot.co.nz

Phone: 07 829 7910 Fax: _____

ADDRESS FOR SERVICE OF SUBMITTER

Full name: As above

Address for service of person making submission: _____

Email: _____

Phone: _____ Fax: _____

TRADE COMPETITION AND ADVERSE EFFECTS *(select appropriate)*

○ I ~~could~~ / ◉ could not gain an advantage in trade competition through this submission.

~~◉ I am / ○ I am not directly affected by an effect of the subject matter of the submission that:~~

~~(a) adversely effects the environment, and~~

~~(b) does not relate to the trade competition or the effects of trade competition.~~

Delete entire paragraph if you could not gain an advantage in trade competition through this submission.

THE SPECIFIC PROVISIONS OF PROPOSED PLAN CHANGE 1 THAT MY SUBMISSION RELATES TO

Please state the provision, map or page number e.g. Objective 4 or Rule 3.11.5.1 (Continue on separate sheet(s) if necessary).

Please see attached 9 pages.

I SUPPORT OR OPPOSE THE ABOVE PROVISION/S

(Select as appropriate and continue on separate sheet(s) if necessary).

- ◯ Support the above provisions
- ◯ Support the above provision with amendments
- ◯ Oppose the above provisions

MY SUBMISSION IS THAT

Tell us the reasons why you support or oppose or wish to have the specific provisions amended. (Please continue on separate sheet(s) if necessary).

I SEEK THE FOLLOWING DECISION BY COUNCIL

(Select as appropriate and continue on separate sheet(s) if necessary).

- ◯ Accept the above provision
- ◯ Accept the above provision with amendments as outlined
- ◯ Decline the above provision
- ◯ If not declined, then amend the above provision as outlined

SUBMISSION POINTS

I am a farmer who is over 70 years of age. I own approximately 245 hectares in the Te Rapa/Te Kowhai/Rotokauri areas of Hamilton. Some of these farms have been in my family for decades. My son and I work the farm and are currently growing maize for grain, maize for silage, onions, lucerne and grass for silage and hay and for grazing beef cattle. I am concerned about the effects of the proposed Plan in terms of how much it is going cost to implement and administer and how this will be funded at a all levels; how it is going to affect my farms in terms of cost, administration and the value of my land. I also am concerned about how this will affect my children and grandchildren in the future. As I am nearing retirement I am concerned about how the Plan Change 1 will affect the ability of our farming business to change and adapt over the coming years. As I am less able to keep up with the demands of farming we are looking at other options including leasing out parts of the land. I am concerned that the Plan Change 1 will limit our ability to be flexible.

We have purchased a boundary spreading capable topdresser to ensure more control over placement of fertilisers. Our fertiliser is applied in the ground and between the plants using liquid and granular fertilisers. This reduces the spread by way of dust and wind displacement. We have fenced parts of our waterways and avoid planting crops too close to the edge of our waterways.

I am concerned about the accuracy of information presented thus far. I have independently tested the water from a bore on one of our farms. This testing was completed by Hills Laboratories (copy attached) and shows that there are <u>below</u> accepted levels of nitrogen in the water. This land has had large amounts of nitrogen applied to it for 40 years. So the theory that nitrogen is leaching into the groundwater and then moving to the waterways does not appear to be supported by this experiment.

I am particularly concerned about the following aspects of Plan Change 1. They will have implications for my property, my current farm business and the economic wellbeing of the Waikato region.

- The significant negative effect on rural communities,
- The broad brush approach which doesn't differentiate between sub-catchments with low levels of environmental damage and those with high,
- The lack of science and monitoring at a sub-catchment level, to identify areas of priority for environmental improvement,
- The cost and practicality of implementing the rules,
- The rules around land change which will restrict the ability to take up market opportunities and restrict the region's economy,
- The cost and practicality of developing a nitrogen reference point,
- The timeframes for complying with the nitrogen reference point rules which are too short, given that OVERSEER is still being developed for the cropping sector,
- The effect that the nitrogen reference point will have on my business, the value of my land and my economic well-being,
- The costs, both cash and loss of opportunity, and the practicality of the rules for stock exclusion, cultivation and setback width,
- The cost of developing and implementing a farm environment plan, leading to the unnecessary and the costly regulation of my farm business,
- The specificity of the rules around cultivation and set-back widths

I set out my concerns more specifically in the table below.

Hill Laboratories
TRIED, TESTED AND TRUSTED

R J Hill Laboratories Limited
1 Clyde Street Hamilton 3216
Private Bag 3205
Hamilton 3240 New Zealand

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E mail@hill-labs.co.nz
W www.hill-laboratories.com

ANALYSIS REPORT

Client:	Hooker & Son Limited	**Lab No:**	1729929	DW/MAVP/1
Contact:	P Hooker	**Date Received:**	24-Feb-2017	
	C/- Hooker & Son Limited	**Date Reported:**	03-Mar-2017	
	11 Fullerton Road	**Quote No:**	83864	
	RD 8	**Order No:**		
	Hamilton 3288	**Client Reference:**	Groundwater	
		Submitted By:	P Hooker	

Sample Type: Aqueous

	Sample Name:	Ground Water 24-Feb-2017 3:00 pm	Maximum Acceptable Value	Outside Limit
	Lab Number:	1729929.1		
Total Suspended Solids	g/m³	< 4 #1	-	-
Nitrite-N	g/m³	< 0.002	0.06 0.91 (short term)	No
Nitrate-N	g/m³	0.62	11.3	No
Nitrate-N + Nitrite-N	g/m³	0.62	-	-
Total Phosphorus	g/m³	0.035	-	-
Escherichia coli	MPN / 100mL	< 1	< 1	No

The Maximum Acceptable Values (MAV) are taken from the publication 'Drinking-water Standards for New Zealand 2005 (Revised 2008)', Ministry of Health.

Copies of this publication are available from
http://www.health.govt.nz/publication/drinking-water-standards-new-zealand-2005-revised-2008

The Maximum Acceptable Values (MAVs) have been defined by the Ministry of Health for parameters of health significance and should not be exceeded. This report compares the results obtained with the Maximum Acceptable Values only. The 'Drinking-water Standards for New Zealand' also contains Guideline Values which are the limits for aesthetic determinands that, if exceeded, may render the water unattractive to consumers.

Analyst's Comments

The samples do not meet the requirements of the NZDWS - samples were greater than 10 °C on receipt in the lab. As such, please interpret these microbiological results with caution. Samples must be kept at less than 10 °C (but not frozen).

#1 There was insufficient sample left to filter the usual amount for the Total Suspended Solids test on sample 1729929/1 so the detection limit is higher than normal.

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Aqueous

Test	Method Description	Default Detection Limit	Sample No
Filtration, Unpreserved	Sample filtration through 0.45µm membrane filter.	-	1
Total Phosphorus Digestion	Acid persulphate digestion.	-	1
Total Suspended Solids	Filtration using Whatman 934 AH, Advantec GC-50 or equivalent filters (nominal pore size 1.2 - 1.5µm), gravimetric determination. APHA 2540 D 22nd ed. 2012.	3 g/m³	1
Nitrite-N	Automated Azo dye colorimetry, Flow injection analyser. APHA 4500-NO_3^- I 22nd ed. 2012 (modified).	0.002 g/m³	1
Nitrate-N	Calculation: (Nitrate-N + Nitrite-N) - NO2N. In-House.	0.0010 g/m³	1
Nitrate-N + Nitrite-N	Total oxidised nitrogen. Automated cadmium reduction, flow injection analyser. APHA 4500-NO_3^- I 22nd ed. 2012 (modified).	0.002 g/m³	1

IANZ ACCREDITED LABORATORY

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked *, which are not accredited

Sample Type: Aqueous			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Total Phosphorus	Total phosphorus digestion, ascorbic acid colorimetry. Discrete Analyser. APHA 4500-P B & E (modified from manual analysis) 22nd ed. 2012. Also modified to include the use of a reductant to eliminate interference from arsenic present in the sample. NWASCA, Water & soil Miscellaneous Publication No. 38, 1982.	0.004 g/m³	1
Escherichia coli	MPN count using Colilert , Incubated at 35°C for 24 hours. Analysed at Hill Laboratories - Microbiology; 1 Clow Place, Hamilton. APHA 9223 B (2004), 22nd ed. 2012.	1 MPN / 100mL	1

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

This report must not be reproduced, except in full, without the written consent of the signatory.

Graham Corban MSc Tech (Hons)
Client Services Manager - Environmental

Page No	Reference (e.g Policy or Rule number)	Support or Oppose	Decision sought Say what changes to Plan Change 1 you would like.	Reasons
40	**Rule 3.11.5.2** Permitted Activity Rule Point 4. b, ii	**OPPOSE in part**	I submit that Point (4. b, ii) is reworded from: "15kg nitrogen/hectare /year: whichever is the lesser, over the whole property or enterprise when assessed with Schedule B and", to read: ii. 100kg nitrogen/hectare /year. I question the basis for setting a limit of 15kgN/ha/year across the whole region. There would appear to be no scientific basis for doing this.	The rule must enable farmers to have the flexibility to change their land uses and possibly increase their nitrogen loss up to a set sub-catchment limit of and still be a permitted activity. Changes in land use that might be considered are: Change in stock type Change in stocking rate Change in cropping activity.
42	***Rule 3.11.5.4*** Controlled Activity Rule – Farming activities with a Farm Environment Plan not under a Certified Industry Scheme	**OPPOSE**	Amend 3.11.5.4 as requested by Federated Farmers in their submission.	This proposal will impose significant costs on my farming activities including the cost of implementing a FEP, fencing of waterways, the administrative costs of setting up and managing the Plan. I am also concerned that this is not practical because the computer programme that is intended to be used for arable farming called OVERSEER is not even fully functioning.

45	**Rule 3.11.5.7 Non-complying activity rule –Land Use change**	**OPPOSE**	Remove this rule: Replace it with a rule that enables land-use change to occur with reference to established sub-catchment limits. Land-use change for farming activities with contaminant losses below the catchment limit is a permitted activity so long as contaminant losses do not exceed the sub-catchment limit. Land-use changes for farming activities with contaminant losses above the sub-catchment limit is a consented activity.	I am concerned that this rule is not practical because: 1. It is too heavy-handed to apply a land-change rule to the whole region. A more flexible approach which acknowledges differences between sub-catchments will prevent unnecessary cost and aggravation for both farmers and the council. 2. The rule as it is written prevents farmers from being able to capitalise on market opportunities in a timely manner. Opportunities could be lost because of the requirement and costs associated with the preparation and approval of consents for land use change. 3. Farm profitability will be constrained by the consent processes and the economic resilience of the region will decrease. 4. The rule disregards the fact that many farmers lease land, some on a short term basis. As the leases change, so will the land-use and it will be difficult to establish whether land use intensification has occurred.
47	**Schedule B Nitrogen Reference Point**	**OPPOSE in part**	I submit that the time frames for the development of NRPs for mixed arable systems is extended until the development work for the OVERSEER crop module is completed. And that the rule be redeveloped to address the inequities that high and low NRP numbers will have on land values. I propose as a fairer approach; Waikato Regional Council develops sub-catchment limits based on the	I am concerned about the level of accuracy in the calculation of NRP because: 1. OVERSEER is not routinely used by the cropping sector. Most arable farmers have had no prior experience with OVERSEER budgets and many certified nutrient managers have had limited experience with modelling arable systems with both crops and stock. I have never used OVERSEER. 2. The Foundation for Arable Research, completed an independent review of OVERSEER in 2013. (https://www.far.org.nz/research/environment/overseer_review). The panel of experts found that OVERSEER is currently the best tool available for estimating long term, average nitrate leaching losses from the root zone across the diversity and complexity of farming systems in New Zealand, but that further work on the cropping model is needed to enhance confidence in the

			scientific measurement and monitoring of contaminant levels within the sub-catchment waterways: Farms in the catchment with NRPs greater than the sub-catchment limit must endeavour to reduce their contaminant losses over time. Farms in the catchment with NRPs below the sub-catchment limit may continue any farming activity as long as their contaminant losses do not exceed the set limit as measured by annual nutrient budgets.	OVERSEER® estimates of nitrate leaching from arable farms. A subsequent work programme validating the nutrient loss numbers from OVERSEER with APSIM has been completed. Recommendations from these pieces of work have not yet been implemented into the OVERSEER crop module 3. Attempts to model cropping systems in OVERSEER often deliver error messages preventing the nutrient reports from running. A number of "work-arounds" have been recommended by OVERSEER Ltd to manage these error messages. This moves the modelled data away from the actual farm data, increases the time and cost to prepare an OVERSEER budget and reduces the level of confidence that the farmer has in the nutrient budget. 4. Nitrogen loss numbers from OVERSEER with a low level of confidence are good to provide a rough estimation of the farm nitrogen loss but they should not be used to develop NRPs for compliance. I am also concerned that a low NRP number will impact on the land-value of my farm, the so-called "grand-parenting" effect. If the Waikato Regional Council develops sub-catchment limits based on the scientific measurement and monitoring of contaminant levels within the sub-catchment waterways, farmers and communities can develop targeted approaches to reducing contaminant levels. The focus is then on those catchments with bigger contaminant loads, with less attention on catchments where the loads are below a level of concern. This is a more equitable approach. It will not incur unnecessary constraints and costs on farmers and is likely to be viewed with greater respect than a blanket approach.
50	Schedule C Stock Exclusion	**OPPOSE**	Amend Schedule C as requested by Federated Farmers in their submission	This proposal will impose significant costs on my farming activities - see above
51	**Schedule 1** Requirements for	**OPPOSE in part**	Amend Schedule 1	I support the requirement for farm environment plans, they provide an opportunity for farmers to understand the

	farm environment plans		I support the requirement that a Farm Environment Plan shall be certified as meeting the requirements of Schedule A. As an addition to the Schedule 1, I submit that farmers should be able to develop their own plans, either on their own accord or as participants in FEP development workshops. Certification of the FEP can be achieved by having the plan reviewed by a Certified Farm Environment Planner. The review will include a farm visit and an assessment of the identified environmental risks for contaminant losses and the mitigation plan for these risks.	environmental risks on their farms and to develop mitigation strategies to reduce the impact of their farming activities on the environment. If farmers develop their own plans, consistency with the Schedule 1 can be achieved by a certification process whereby the plan is reviewed by a Certified Farm Environment Planner, and the review includes a farm visit and an assessment of the identified environmental risks for contaminant losses and the mitigation plan for these risks. The reasons for this additional provision is to: 1. Reduce the cost of plan development. Consistency in the quality of the plans will be maintained by the review process. 2. Reduce the level of dependence and likely pressure on Certified Farm Environmental planners for plan development.
52	Schedule 1- Point (f)(i) A description of cultivation management.	**OPPOSE in part**	I submit that Point (f)(i) is removed from Schedule 1. and point f is re-worded to read: (f) A description of cultivation management, including: How the adverse effects of cultivation will be mitigated through appropriate erosion and sediment controls for each paddock that will be cultivated including by: Points (a), (b), (c) and (d)	I accept that sediment movement from cultivated land is an environmental risk. Soil losses also have a direct economic cost to the farm, however a rule preventing cultivation on slopes exceeding 15° is impractical because: 1. The risk of contaminating water ways with sediments is more strongly related to the distance between the cultivated land and the receiving waterway than the slope of the land. In many instances sediments moving from cultivated land will not directly affect waterways. 2. When considering the environmental risks associated with cultivation the farmer and the environmental consultant must consider the following characteristics of the cultivated land: slope, proximity to receiving water bodies, overland flows (point a),

			Points (e) and (f) do not apply to the risks associated with cultivation. I submit that these points are renumbered and removed from the cultivation clause.	measures to divert overland flows (point b) and ways to trap sediment (point c). Only if there is a high risk of contaminants getting into waterways and no practical means of stopping them, should cultivation be avoided. This can be addressed in individual farm environment plans. 3. The measurement of slope by farmers and consultants is difficult as slope is not consistent within the landscape. Within a paddock, slope will vary, and if the rule is to be upheld there will parts of the paddock which will need be left uncultivated. This poses a number of costs and management problems to the farmer, including: • The lost opportunity cost of land taken out of production. • The requirement to find an alternative productive and efficient use for the land. 4. Implementation and enforcement of this rule will require detailed slope information such as LIDAR, for every Waikato farm. Will WRC be able to supply this information to all farmers?
51	**Schedule 1-Points 2(b)(iii) and 2.(f)(ii)(d)- Setback Width**	**OPPOSE in part**	I submit that: points 2(b)(iii) and 2(f)(ii)(d) in Schedule 1 should be re-worded to read; 2(b)(iii) - The provision of cultivation setbacks is designed to mitigate the environmental risk of contaminant losses. 2(f)(ii)(d) - maintaining appropriate buffers between cultivated areas and water bodies.	A defined width for the setback of a minimum 5m is too prescriptive and will lead to a direct cost to the farm from the lost opportunity of land taken out of production and the ongoing maintenance of managing the vegetation in the set-back. Setbacks are important to reduce the risk of contaminants entering waterways but width should not prescribed in the rules. The design of setbacks to filter contaminants depends on a number of physical characteristics such as slope, soil type, overland flow paths and cultivation frequency and intensity. Effective setback design draws on proven scientific and engineering information, not regional rules. Environmental consultants developing mitigations in the farm plan process must design setbacks that are acceptable to the farmer. Setback width must be based on proven scientific evidence and

				must be the minimum width to effectively filter contaminants. Setbacks that are too wide have an ongoing economic loss for the farm relating to the area of land removed from production and costs associated with weed and riparian plant control. In the report to Waikato Federated Farmers Farm Environment plan project, with reference to farm 5, the opportunity cost from lost production from the development and maintenance of 5-metre buffer zones separating the drains from the crops was estimated to be $100,000. On this farm the topography is flat and the farmer felt the width of setbacks was excessive given that the risk of sediment movement into the drain was low and the risk period for sediment losses between cultivation and significant crop cover was 1 month for spring and autumn sown crops. Research shows that 91% of incoming sediment through a grass filter strip was deposited in the first 0.6m. (Parklyn, S. (2004, September). Review of Riparian Buffer Zone (MAF). A 0.6m grass strip at a slope of 10% will reduce soil loss between 63-85% depending on the cultivation programme of the land (Yuan, Bingner, & Locke, 2009). Compared to other vegetation, grasses were found to be the option for trapping sediments.

PLEASE INDICATE BY TICKING THE RELEVANT BOX WHETHER YOU WISH TO BE HEARD IN SUPPORT OF YOUR SUBMISSION

◯ I wish to speak at the hearing in support of my submissions.

☑ I do not wish to speak at the hearing in support of my submissions.

JOINT SUBMISSIONS

◯ If others make a similar submission, please tick this box if you will consider presenting a joint case with them at the hearing.

IF YOU HAVE USED EXTRA SHEETS FOR THIS SUBMISSION PLEASE ATTACH THEM TO THIS FORM AND INDICATE BELOW

☑ Yes, I have attached extra sheets. ◯ No, I have not attached extra sheets.

SIGNATURE OF SUBMITTER

Signature: [signature] Date: 8/3/17

Personal information is used for the administration of the submission process and will be made public. All information collected will be held by Waikato Regional Council, with submitters having the right to access and correct personal information.

PLEASE CHECK that you have provided all of the information requested and if you are having trouble filling out this form, phone Waikato Regional Council on 0800 800 401 for help.