

1. Introduction | Submission & Evidence

- 1.1. On 28 February 2017 submissions were filed with the Waikato Regional Council in response to Plan Change 1 by **Charion Investment Trust (Submitter 71344)** and **Fletcher Trust (Submitter 73848)**.
- 1.2. On 3 May 2019 a Synopsys of primary evidence was filed for both submitters by Charles Fletcher and Dr John Bircham.
- 1.3. Both Charles Fletcher and Dr John Bircham appear today (10 July 2019) to complete the presentation of evidence for the Hearing Commissioners and to answer any questions.
- 1.4. Our evidence is being given in respect of the whole of Plan Change 1, to cover:
 - a. Block 1 – Overview, values, uses, science & economics¹
 - b. Block 2 – Policies & Rules²
 - c. Block 3 – Vegetables, FEP, Wetlands, misc, alternatives incl sub-catchment planning³
- 1.5. Within each block issues have been addressed by topic.
- 1.6. Given the time that has elapsed, changes which have occurred since this process started, a better focus and understanding of environmental issues for our farms and the greater detail which has emerged from the Waikato Regional Council (WRC) for PC1, further comment is warranted.
- 1.7. You have our utmost respect and we are in your hands as to the outcome of this hearing. Understanding so many complex issues and the huge volume of conflicting information is beyond most of the 1000+ submitters to this plan change.
- 1.8. Sadly this hearing process is grossly unfair to all Waikato property owners and farmers affected by PC1.

¹ Released on 14 January 2019

² Released on 5 April 2019

³ Released on June 2019

1.9. The Waikato Regional Council is spending \$30+ million (of our money as rate payers) on PC1 and our ability, as individuals or even as industry groups, to compete with the funding and resources deployed by the Waikato Regional Council is grossly unbalanced.

2. Helicopter View

2.1. PC1 seeks to “help restore and protect the health of the Waikato and Waipa rivers” in the areas which affect the Waikato River and the Waipa River with water runoff or tributaries.

2.2. The Regional Council focus is therefore the water systems which impact on the Waikato River and the Waipa River. That is why we are here.

2.3. The Regional Council has introduced PC1 as a set of policies, principles, methods and rules to influence water out comes. But, PC1 has targeted farming to deliver a solution to the water out comes for the next 80 years, under the umbrella of the Resource Management Act and its strict liability obligations which adversely impact on every property owner and user.

2.4. It is clear that the authors of PC1 are not farmers nor do they have an understanding of farming.

2.5. Given the water quality data from the Waikato River, down-stream from Hamilton seems to be more of a problem than up-stream (from Taupo to Cambridge) strongly suggesting that the greatest risk to the restoration and protection of the health of the Waikato and Waipa rivers is urbanization.

2.6. Strangely the urban run-off is not a factor for the first 10 years of PC1! Why?

2.7. Taking a helicopter view:
a. what is the problem? and
b. what is the solution?
c. does PC1 answer these questions?

- 2.8. Being dragged into a minute examination of the proposed rules results in taking your eyes off the fundamentals and these questions.
- 2.9. The identified problem cannot be solved by a simple focus on N, P, E.coli and sediment controls.
- 2.10. Assumptions are a critical element of some of the issues. E.g. N leaching taking up to 50 years to make its way through the ground water systems to rivers and lakes ... but there is no credible uncontested evidence that supports this proposition.
- 2.11. Scientifically P does not leach. Its movement is in conjunction with sediment (as P is attached to soil particles which make up the sediment). E.coli primarily comes from the excrement of bird life and animals and its movement follows the same movement as sediment, across land.
- 2.12. Leaching of N occurs in multiple ways. Into the air, through the digestive systems of livestock and in water (dissolved) across land and down through the soil (how far down, carried for what distance and over what time frame is unknown).
- 2.13. Farming is a complex and dynamically changing system of land use, stock and land management, from season to season and sometimes from week to week.
- 2.14. Decisions made today often have implications for the next one to two years on the farm and how it is farmed ... so flexibility is a critical factor to successful farming. This includes the need to be able to make changes quickly; e.g. a decision to import feed or crop land in the face of possible impending adverse weather conditions, changes to stocking rates and land use. These are tools for risk management which all farmers deploy consciously or unconsciously every day.
- 2.15. It is a nonsense to contemplate a need to apply for a consent from the Council for any number of decisions which PC1 proposes to control.
- 2.16. Good farmers do not need a set of rules and methods which direct what you cannot do. They have a massive financial investment in

their farms, plant, equipment and livestock, so their interests will always be to do the best by their farming operations, where protecting the environment is a critical part of doing this and always has been.

- 2.17. Industry bodies do have a significant influence over farmers.
- 2.18. Dairy NZ provides excellent resources, at no cost other than the levies paid each month by dairy farmers, so there is no excuse for a farmer to not have access to information, education, expertise or help for any aspect of a dairy farming operation.
- 2.19. Milk supply companies have extensive terms and conditions for supply, which are monitored on an ongoing basis. Non-compliance will result in suspension of milk collection and serious economic cost to a farmer.
- 2.20. We supply Fonterra and it does provide its shareholder suppliers with comprehensive support, particularly if problems should develop on farm and become a threat to milk quality.

3. Milk Urea and PKE

- 3.1. Every day our milk is collected by Fonterra, milk samples are taken for testing and analysis. Some information is reported to the farmer immediately (on the docket recording the milk collected) or via the smart phone app the same day or the next day (depending on what is being reported on)
- 3.2. Milk Urea is a measure of N in the milk supplied. That data is reported every collection. The farmer has a daily report of the N output from the milking herd. If the number is less than 20 that suggests a deficiency in the feed. If the number is over 30 that suggests an excess. This is a useful monitor and the farmer can then focus on the cows diet to correct the imbalance over a number of days.
- 3.3. In cold weather (particularly frosts) grass and oats will draw N from the root zone into the leaf material of the plant. Any good farmer knows to delay grazing of leafy plants until the temperature has risen (frost has gone) so as to avoid nitrate poisoning (the N has returned to the root zone of the plant. A folia application of boron

on a leafy oat crop can also assist in the suppression of nitrate poisoning.

- 3.4. Molybdenum is a trace element which is also drawn up into the leaf material of plants in frost conditions and can result in stock death by poisoning (it also returns to the root zone as the temperature rises above freezing). Following the second world war the NZ Government promoted the application of Molybdenum with super phosphate and paid for it. It does not leach and remains a threat in areas which applied it to farm land for many years.
- 3.5. The NZ Government was also responsible to the tree planting programs in the 1950's and Lake Taupo was affected by the huge volumes of urea (many tonnes to the acre) which were applied during the establishment of those forestry areas.
- 3.6. The milk collection also includes a 'fat evaluation index' or FEI. This is a test developed to determine milk quality and 'tainting' due to feeding of PKE. So, on a daily basis, a farmer can see the running average of the FEI and the trend. If the FEI is too high a grade will be triggered and that has a serious financial impact if it continues and not corrected promptly.
- 3.7. Most milk companies have a comprehensive milk testing program and traceability of milk in products made from that milk.
- 3.8. I am aware of a Northland farmer, who used a non-approved chemical on his milking herd, who had to pay a substantial fine when a product test in Europe found the chemical and it was traced back to his farm.

4. Overseer

- 4.1. Since PC1 was notified the owners of Overseer have placed a significant stake in the ground with Overseer FM:
 - a. Overseer is "New Zealand software that enables farmers and growers to improve nutrient use on farms, delivering better environmental outcomes and better farm profitability",
 - b. the data in Overseer belongs to the farmer,
 - c. that data can only be released to a third party with the permission of the farmer,
 - d. it is not a Regulatory tool.

- 4.2. With WRC recognising Overseer is not ideal for its regulatory purposes and significantly modifying its proposed rules regarding the use of Overseer most of our concerns (as recorded in our 28-2-17 submissions) are addressed.
- 4.3. I am a user of Overseer, so understand its limitations and benefits.
- 4.4. It is not appropriate to lock the use of Overseer into PC1.

5. N cap

- 5.1. As indicated in our submissions, we strongly object to the proposed N cap and any modification of it.
- 5.2. Our dairy farm has always been a low user of N as our farming focus has included building our topsoil and root zones, using biological fertilisers and humates for improved soil bacterial function, strong worm life, strong clover growth, maintaining a soil pH of between 6.0 and 6.2 and balancing our Ca and Mg levels.
- 5.3. Our Overseer N leaching assessment is between 38 and 50 over the period from 2014 to 2019.
- 5.4. Urea does burn soil carbon, reducing the productive topsoil root zone, so its use does not benefit the long term objectives for the improvement and productivity of our farm.
- 5.5. The 75 percentile and N cap discriminates against farmers like us, who have not aggressively pushed N use, and rewards the farmers who have been excessive users of N and potentially the greatest environmental polluters. It should be abandoned.

6. Land use restrictions

- 6.1. WRC has taken the opportunity to introduce land use restrictions under the guise of rules designed to govern water quality to benefit swimming and fishing in our Waikato rivers and lakes.
- 6.2. Land use restrictions are not a solution to the movement of sediment, P and E.coli across land and into waterways, nor the control of N leaching.

- 6.3. Land use restrictions will destroy economic value to existing Waikato farms and add future compliance costs and time delays (seeking consents). These consequences are the contrary to the provisions of s.5 of the RMA, in that the economic cost to farming and farm ownership fails to promote the sustainable management of natural and physical resources.
- 6.4. I ask that you reject the proposed land use restrictions in PC1 and consequential consenting requirements. They inappropriately stifle farming, innovation and flexibility required to adapt to the best use of our farming resources in the Waikato.

7. Sediment, P and E.coli

- 7.1. I support the submission made by Dr Jon Bircham. WRC has failed to consider options for controlling the overland movement of sediment, P and E.coli.
- 7.2. Because our dairy farm does not have any water, over land or as a water course, entering or leaving the property it is a simple task for us to plant trees and plants, in defined low land areas, to substantially trap sediment inside our farm boundaries in the event of a major rain event. Such plantings will act as a barrier to the overland movement of sediment, P and E.coli.
- 7.3. If all farm owners did the same the cumulative effect will have a positive impact on the overland movement of sediment, P and E.coli, limiting the volume that ultimately enters streams, rivers and lakes in the Waikato.

8. Nitrogen leaching

- 8.1. Controlling the application rate and type of N will significantly impact on the control of N leaching.
- 8.2. N is an abundant element in the air (N₂ some 78%) and soil organic matter, in and used by plants. It is also processed in the digestive systems of animals and, in cows, excess N is found in milk (milk urea) and urine.

- 8.3. In the root zone of plants N is an essential part of the nutrient needs of plant growth. It is very soluble and water can carry excess N under the root zone, deep into the sub-soil and underground water aquifers. At this stage there is little or no science explaining what happens to N below the root zone of plants. The assumptions of PC1 include the movement of N through the soil and underground water aquifers over many years (up to 50 years speculated) finishing up in our rivers and lakes by some means.
- 8.4. Given nitrification and denitrification (N, NO, NO₂, N₂O, NO₃, NH₄) and the speed of volatility of N converting into atmospheric N₂ and other elements it is hard to understand how or why N does not change just as quickly in the soil or when it travels through the soil in water.
- 8.5. Genetics are now being developed providing grass and stock which produce less detrimental N outputs and it is only a matter of time before the environment will benefit from such developments.
- 8.6. PC1 is a cynical attempt to introduce rules for land use controls and restrictions with N as the bogymen.
- 8.7. Ireland has restricted the application of urea to farmland during high rain fall periods (e.g. autumn and winter) and we know that urea has almost no benefit in the soil when applied in dry summer conditions (nitrification into the atmosphere occurs within a few days), so common sense suggests that controls on the application of urea can produce maximum benefits and minimal environmental harm.
- 8.8. We have limited any N application to 40kgs/ha by folia application (mixed with water at not less than 200l/ha) to maximise the plant benefit and severely restrict any environmental detriment.
- 8.9. N leaching is a short term problem which can be resolved with simple limitations that do not require land use limitations of controls.

9. Farm Environment Plans

- 9.1. The PC1 proposal for FEP's (original and modified) is lunacy in the form of bureaucracy gone mad.
- 9.2. The authors of PC1 have no farming experience or qualifications, evidenced by the concept of the FEP's. FEP's have no place in a Council Plan and the concept should be abandoned immediately.
- 9.3. In my synopsis of primary evidence (3-5-19) I outlined my concerns as to the consequences of FEP's controlled and regulated by the Council.
- 9.4. Perhaps the better approach is farmer driven for the creation and adoption of an FEP, with "farm best practice" concepts driven by industry bodies such as Dairy NZ, Fonterra, Federated Farmers and WRC taking an oversight role (maybe with an "audit" ability/function). Economics will be the best driver for compliance; e.g. the milk company refusing to collect milk from a non-complying dairy farm.

10. Table 3.11

- 10.1. Our original submission included comments on Table 3.11
- 10.2. The Council Officers have commented on our submissions so I include my original submission table below and the Officers comments in the right column.
- 10.3. Nine of our fourteen issues have been accepted or a modification proposed by Council.

Issue	Page #	Provision for Plan Change	Support or Oppose	Comment/Submission	Decision sought	s.42A Report
Plan change – 3.11.2 Objectives						
1	27	Objective 1	Support part Oppose part	Accept that an 80 time frame will enable the Vision and Strategy to be achieved. Recognition is required that for some places and attributes restoration is not necessary as the current state of the attribute remains in the target range.	Amend Objective 1 to read: By 2096, discharges of nitrogen, phosphorus, sediment and microbial pathogens to land and water result in the achievement of the restoration and protection and, where necessary, restoration of the 80-year water quality to achieve the 80 year attribute targets in Table 3.11-1.	
2	27	Objective 2	Oppose part	Our current economies, especially farming, currently rely on the free use of water and this should be recognised.	Amend Objective 2 to read: Waikato and Waipa communities and their economy benefit from existing water use and will further benefit from the restoration and protection of water quality in the Waikato River catchment, which enables enabling the people and communities to continue to provide for their social, economic and cultural wellbeing.	Fletcher Trust and Charion Investment Trust seek that Objective 2 recognises that economic well-being is also reliant on the use of water. Recommendation Amend Objective 2 as follows: <i>Social, economic and cultural wellbeing is maintained in the long term/Te Whāinga 2: Ka whakaūngia te oranga ā-pāpori, ā-ōhanga, ā-ahurea hoki i ngā tauroa</i> <i>Waikato and Waipā communities and their economy benefit from the restoration and protection of water quality in the Waikato and Waipā⁴¹ River</i>

						<i>catchments, which enables the people and communities to continue to provide for their social, economic and cultural wellbeing.</i>
3	27	Objective 4	Oppose part	<p>No recognition of the economic costs or influences to change, which are a practical reality going forward.</p> <p>As science focuses on the objectives of PC1, solutions are likely to emerge which may not require the need for future contaminant reductions to be the only option.</p> <p>Locking in a program for further intervention in management is a process not an objective.</p>	<p>Amend Objective 2 to read: A staged approach to change enables people and communities to undertake adaptive management to continue to provide for their social, economic and cultural wellbeing in the short term while:</p> <p>a. considering economic costs, the values and uses when taking action to achieve the attribute^ targets^ for the Waikato and Waipa Rivers in Table 3.11-1; and</p> <p>b. recognising that further contaminant reductions willmay be required by subsequent regional plans and signalling anticipated future management approaches that will be needed to meet Objective 1.</p>	<p>Charion Investment Trust also submits that solutions are likely to emerge which may not require the need for future contaminant reductions to be the only options, and states that locking in a program for future intervention is not an objective. They request specific amendments in support of their submission. FANZ seeks similar amendments.</p> <p>Analysis</p> <p>Objective 4 provides for a staged approach to the long term achievement of the Vision and Strategy, to minimise social disruption in the short term, while encouraging preparation for possible future requirements. The submission from Charion Investment Trust identifies that describing a programme for future intervention is not an objective. The Officers have reviewed Objective 4 in response to this submission and the submission from Watercare. It is the Officers' view that Objective 4 does not describe an outcome or future state, but rather outlines implementation methods and a programme for future intervention, which are typically contained in policies and rules (s67(1) (b) and (c) of the RMA). On this basis, the Officers recommend that Objective 4 be deleted, noting that the deletion of the objective will have little</p>

					<p>consequence as these matters are well covered by Policies 5 and 7. While the Officers recommend that the objective is deleted, the Hearing Commissioners may reach a different view on whether or not Objective 4 is indeed an objective and not an implementation method. In this event, to assist the Hearing Panel in making a decision whether any amendments to Objective 4 are necessary, an analysis of the submissions on Objective 4 has been undertaken below.</p> <p>Recommendation</p> <p>Delete Objective 4, or in the alternative, amend Objective 4 as follows:</p> <p><i>A staged approach to reducing contaminant losses change⁴⁹ enables people and communities to undertake adaptive to continue to provide for their social, economic and cultural wellbeing in the short term while:</i></p> <ol style="list-style-type: none"> <i>1. considering the values and uses when⁵⁰ taking action to achieve the attribute targets^Δ states⁵¹ for the Waikato and Waipā Rivers in Table 3.11-1; and</i> <i>2. recognising that further contaminant reductions will be required by subsequent regional plans and signalling anticipated future management approaches that will be needed in order⁵² to meet Objective 1⁵³.</i>
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						All other provisions for Objective 4 deleted.
4	30	Policy 1	Oppose part	Is there a potential inconsistency between Policy 1a and Policy 4 with regard to the approach taken to activities with a low level of contaminant discharge?	Review Policy 1 for consistency with Policy 4 as it relates to the policy test that applies to the enablement of low discharging activities.	
5	30	Policy 2	Oppose part	This policy does not relate effectively with the rules that seek to implement it; i.e. part d of the policy. That implies that those preparing farm environment plans (FEPs) will make discretionary judgements about the degree of reduction of nitrogen, phosphorus, sediment and E.coli each farm is to achieve, proportionate to current discharge and the scale of water quality improvement required in the catchment. This is not how the rules can or should work.	Replace part d of Policy 2 so that it reads: Requiring farm environment plans to identify the areas and activities representing diffuse discharge risks and the most effective way of managing those risks on the particular property.	
6	31	Policy 3	Oppose	As very little information is available on the environmental performance of commercial vegetable production it is difficult to understand a Policy or Rules which seek to regulate this activity in this manner. Without clarity as to effects and outcomes it is not possible to have the Policy or Rules.	Remove Policy 3 entirely. Alternatively amend Policy 3 as follows: b. The maximum area in production for a property or enterprise in any single year is established and capped at the largest area in production for that property or enterprise in any	Charion Investment Trust, FANZ, Fletcher Trust, Fonterra, Ravensdown and Wairakei Pastoral Ltd all seek clarification in Policy 3 to clarify when the 10% reduction in N discharges needs to be achieved and that it applies relative to the NRP across all growers.

				<p>If retained, the policy needs to confirm that the maximum area being referred to in part b is the footprint that represents the largest footprint used in a single year over the 2006-2016 period rather than the aggregate of all areas used for commercial vegetable production over the period 2006-2016.</p> <p>The policy also needs to make clear that the 10% reduction in nitrogen loss across the sector is relative to the cumulative nitrogen reference points of all commercial vegetable growers (i.e. the 10 year average nitrogen discharge). It also needs to be made clear that the 10% reduction is to be achieved by 2026.</p> <p>The point made in relation to Policy 2 in submission 5 above, also applies to Policy 3.</p>	<p>single year over the 10 year period ending 1 January 2016 as determined by utilising commercial vegetation production data from the 10 years up to 2016; and</p> <p>d. A 10% decrease by 2026 in the rate of diffuse discharge of nitrogen relative to the nitrogen reference point and a tailored reduction in the diffuse discharge of phosphorus, sediment and microbial pathogens is achieved across the sector through the implementation of Best or Good Management practices; and</p> <p>Delete part g and replace with the following</p> <p>g. Requiring farm environment plans to identify the areas and activities representing diffuse discharge risks and the most effective way of managing those risks on the particular property.</p>	<p>Policy 3: Tailored approach to r Reducing diffuse discharges from commercial vegetable production systems</p> <p>Provide for commercial vegetable production while reducing Manage and require reductions in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens by: from commercial vegetable production through a tailored, property or enterprise-specific approach where:</p> <ol style="list-style-type: none"> 1. Enabling commercial vegetable production activities, Flexibility is provided including the flexibility to undertake crop rotations on changing parcels of land for commercial vegetable production, within sub-catchments, while reducing average contaminant discharges over time adopting sector-based initiatives and other mitigation measures to progressively reduce losses of nitrogen, phosphorus, sediment and microbial pathogens; and 2. The maximum area in production for a property or enterprise is established and capped utilising commercial vegetable production data from the 10 years up to 2016; and 3. Establishes baselines for each property from the baseline period using commercial vegetable production data from each of the 5 years up to 2016 for; <ol style="list-style-type: none"> 1. (i) the maximum area of land in commercial vegetable production; and 2. (ii) the nitrogen and phosphorus surpluses (ie total applied nutrient
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						<p>inputs, less crop uptake) for each commercial vegetable production crop; and</p> <p>(iii) sediment control measures; Establishing a Nitrogen Reference Point for each property or enterprise; and</p> <p>4. A 10% decrease in the diffuse discharge of nitrogen and Enabling commercial vegetable production that clearly demonstrates a tailored reduction in the diffuse discharge of nitrogen, phosphorus, sediment and microbial pathogens as measured against the baselines identified in b above of all contaminants through adherence to Good Farming Practice, Farm Environment Plans and relevant minimum standards; is achieved across the sector through the implementation of Best or Good Management Practices; and</p> <p>5. Identified mitigation actions are set out and implemented within timeframes specified in either a Farm Environment Plan and associated resource consent, or in specific requirements established by participation in a Certified Industry Scheme.</p> <p>6. Commercial vegetable production enterprises that reduce nitrogen, phosphorus, sediment and microbial pathogens are enabled; and</p> <p>7. The degree of reduction in diffuse discharges of nitrogen, phosphorus, sediment and microbial pathogens is proportionate to the amount of current discharge (those discharging more are expected to make greater reductions), and the scale of water quality improvement</p>
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						<p>required in the sub-catchment.</p> <p>8. Providing for resource consents for enterprises to encompass multiple properties within a single sub-catchment,</p> <p>provided that:</p> <ol style="list-style-type: none"> 1. (i) a to d above are met; and 2. (ii) There is clear accounting against contaminant baselines across the multiple properties, including on any land that is no longer used for commercial vegetable production, such that sub-catchment-wide diffuse discharges progressively decrease
7	31	Policy 4	Oppose	<p>Activities with low discharges should be allowed to continue and for new ones to establish.</p> <p>This policy is complex and unclear. In particular, the policy appears inconsistent with Policy 1 as it appears to apply a different policy test as to when low discharging farming activities should be enabled.</p> <p>It is also not clear whether Policy 4 is intended as the foundation policy for Rule 3.11.5.3 or just for Rules 3.11.5.1 and 3.11.5.2.</p> <p>Perhaps the policy foundation for Rule 3.11.5.3 should be</p>	<p>Amend Policy 4 to read:</p> <p>Enable existing farming activities or new activities that make a small contribution to contaminant loads and/or that pose a low risk of contaminant discharge because they:</p> <ol style="list-style-type: none"> (a) occupy a small land area; and/or (b) have a low nitrogen discharge per hectare (and/or the land is not used for an intensive farming use); <p>provided that high diffuse discharge risk practices are avoided.</p> <p>Advisory note: Activities and uses defined as low dischargers may in</p>	

				<p>addressed by a separate policy given the different policy justification for that rule.</p> <p>Finally, the second sentence of the policy would be more appropriate as an advisory note.</p>	<p>the future need to take mitigation actions that will reduce diffuse discharges or nitrogen, phosphorus, sediment and microbial pathogens in order for Objective 1 to be met.</p> <p>Add a new Policy 4A</p> <p>Enable existing farming activities that have a low risk of contaminant discharge for their farming type and/or a likelihood of diffuse discharge reductions over time because:</p> <p>(a) they are part of an industry scheme designed to manage diffuse discharge risk; and</p> <p>(b) the industry scheme includes a commitment to reduce the diffuse nitrogen discharge of the highest discharging 25% of farming activities within its scheme to a diffuse nitrogen loss rate that does not exceed the 75th percentile of all farming activities within the industry scheme.</p>	
8	31	Policy 5	Oppose part	<p>The 80 year staged approach is supported as is the recognition of social and economic costs of an unstaged approach to achieving</p>	<p>Amend Policy 5 to read: Recognise that achieving the water quality attribute^</p>	

				<p>the Vision and Strategy's ultimate goals.</p> <p>Some minor wording changes would assisting with clarity.</p>	<p>targets^ set out in Table 11-1 will need to be staged over 80 years, to minimise adverse social and economic effects disruption and allow for innovation and new practices to develop, while making a start on reducing discharges of nitrogen, phosphorus, sediment and microbial pathogens, to achieve Objective 3 and preparing for further reductions that will be required in subsequent regional plans.</p>	
9	32	Policy 6	Oppose	<p>Regulating land use is an Orwellian provision, which is an unnecessary addition to the Policies and Rules regulating the targeted control and reduction of Nitrogen, Phosphorus, Sediment, and Microbial pathogens.</p> <p>Land use regulation impacts on the economic value of the land and is improper use of a power by the Council.</p>	Delete Policy 6 and all associated Rules	
10	32	Policy 7	Oppose	<p>The policy appears to address three indirectly related points:</p> <ul style="list-style-type: none"> a need/intent to get better information about 	<p>Redraft Policy 7 as follows:</p> <p>Gather information and undertake scientific research about discharges and contaminant loads in the Waikato and Waipa</p>	<p>Others oppose the provision and state that it is premature and unnecessary to include reference to future allocation and for WRC to have a prescribed methodology and principles for allocation</p>

				<p>contaminant discharges and their effects</p> <ul style="list-style-type: none"> in future there will be “allocation” (i.e. a (re)distribution of the right to discharge amongst competing land uses) when council does allocate certain principles will be applied. <p>It is premature and unnecessary to include reference to the second and third matters in the Policy.</p>	<p>catchments to support future policy making which will most effectively and efficiently achieve reductions in nitrogen, phosphorus sediment and E.coli beyond those identified in Objective 3.</p>	<p>Officers are concerned that Policy 7 and the associated implementation method are at best a statement of intent. Any future planning regime will be required to reassess a property level allocation mechanism, if indeed one is appropriate, without pre-judgement as to the best approach. In short, 10 years is a long time with respect to policy and technical advances in nutrient management and whether the framework established in Policy 7 is the best is not be able to be judged at this point in time.</p> <p>Overall, Officers recommend that Policy 7 be deleted in its entirety, rather than adjusted to identify some other framework or made more general.</p>
11	32	Policy 8	Oppose	<p>As all sub-catchments contribute to the water quality of the Waikato and Waipa rivers there seems to be no environmental rationale for this provision</p>	<p>Delete Policy 8 and all associated Rules</p>	
12	33	Policy 9	Oppose	<p>Sub-catchment planning and edge of field mitigation, as means of improving water quality outcomes, is useful but inappropriate if used as a justification for farming activities not adopting appropriate measures on-farm.</p> <p>The intent of Policy 9 applies to obligations</p>	<p>Delete Policy 9, modify Policy 2 as required and all associated Rules</p>	<p>Many of these submitters request Policy 9 is deleted⁸.</p> <p>Recommendation:</p> <p>Amend the definition to read:</p> <p>Definition – Sub-catchment Sub-catchment: For the purposes of Chapter</p>

				required by other policies and should be incorporated in those policies.		3.11, means an area of land within the Waikato and Waipa ¹³ River Catchments ¹⁴ representing the contributing area draining to one of the 74 locations in the stream and river network, and used as the basic spatial unit for analysis and modelling. ¹⁵
13	33	Policy 10	Oppose part	As farming operations involve a substantial capital investment this Policy should also consider their continued operation and economic benefit to the region.	Add sub-paragraph c. to Policy 10 as follows: c. Continued operation of associated farming operations and their economic benefit to the region/sub-catchment.	
14	35	Policy 17	Oppose part	Farming practices will benefit from new science, methods and ideas going forward and these should be incorporated in this policy.	Add sub-paragraph c. to Policy 17 as follows: c. new science, methods and farming concepts to enhance farming in the region.	Fletcher Trust and Charion Investment Trust suggest new science, methods and ideas should be incorporated into Policy 17 as farming practices will benefit from this addition Recommendations Amend Policy 17 as follows: When applying policies and methods in Chapter 3.11, seek opportunities to advance those matters in the Vision and Strategy and the values^ for the Waikato and Waipā Rivers that fall outside the scope of Chapter 3.11, but could be considered secondary benefits of methods carried out

						<p>under this Chapter⁷², including, but not limited to:</p> <ul style="list-style-type: none"> a. Opportunities to enhance biodiversity, wetland values[^] and the functioning of ecosystems; and b. Opportunities to enhance access and recreational values[^] associated with the rivers.
15	36	3.11.4.2 and 3.11.4.3	Oppose part	<p>Application of the proposed Certified Industry Scheme (with formal agreements between parties) is another Orwellian provision that will add substantial cost to the farmer.</p> <p>There needs to be provision for farmers and competent persons, not being “professionals” or “certified”, to compile Farm Environment Plans where the farming activities are not intensive and not in need of “oversight, and monitoring” (e.g. because the farm has minimal potential to affect the waterways, lakes or rivers due to zero or low use/outputs of Nitrogen, Phosphorus, Sediment, and Microbial pathogens).</p> <p>The requirements associated with Rule 3.11.5.4 should be the same as those applicable under Rule 3.11.5.3.</p>	<p>Add provision for discretion to allow the adoption of Farm Environment Plans that meets the criteria for information required by the Council without being prepared or monitored by a “Certified” professional.</p> <p>In addition amend Rules to ensure the following conditions apply to a controlled activity (after 1 July 2020):</p> <ol style="list-style-type: none"> 1. The property is registered with the Waikato Regional Council in conformance with Schedule A; and 2. A Nitrogen Reference Point is calculated for the property or enterprise in conformance with Schedule B and was provided to the Waikato Regional Council within the period 1 	

				<p>In particular, FEPs should be required by 1 July 2020 and discharges should not exceed the reference point from that date.</p> <p>It would also be preferable to split the rule into a permitted rule (until 30 June 2020) and a controlled rule (applying from 1 July 2002)</p>	<p>September 2018 to 31 March 2019; and</p> <p>3. The five year rolling average does not exceed the Nitrogen Reference Point calculated in accordance with condition 2 from the date on which the nitrogen reference point is provided to the Waikato Regional Council; and</p> <p>4. Cattle, horses, deer and pigs are excluded from water bodies in conformance with Schedule C.</p> <p>Remove the reference to priority catchments and associated dates from the Matters of Control.</p>	
16	37	3.11.4.5	Oppose part	<p>In developing sub-catchment scale plans provision should be made to review and include new science and methodology.</p>	<p>Modify Rule 3.11.4.5 to read: Waikato Regional Council will work with others to develop sub-catchment scale plans (where a catchment plan does not already exist) where it has been shown to be required. Sub-catchment scale planning, considering ongoing scientific developments and new methodologies, will:</p>	

					a.	
17	37	3.11.4.7	Oppose part	The grouping of properties in a sub-catchment will provide a more effective focus on the outcomes the Rules seeks to achieve, therefore this Rule should reflect this.	Amend Rule 3.11.4.7 by adding the words: sub-catchment or, where necessary, individual property or enterprise-level ... to subclause a. and b. iii.	
18	38	3.11.4.9	Oppose part	The urban areas, the road network and rail network all contribute to the Nitrogen, Phosphorus, Sediment, and Microbial pathogens levels. This is not just a farming problem.	Amend Rule 3.11.4.9 by adding a sub-clause c. to read: c. Consider the effects of Nitrogen, Phosphorus, Sediment, and Microbial pathogens levels in water discharged from urban areas and the road and rail networks when assessing those levels in lakes, rivers and tributaries impacting on the Waikato River and the Waipa River.	Charion Investment Limited and the Fletcher Trust propose inserting an additional clause (c) to consider the effects from urban areas, road and rail networks: c. Consider the effects of Nitrogen, Phosphorus, Sediment, and Microbial pathogens levels in water discharged from urban areas and the road and rail networks when assessing those levels in lakes, rivers and tributaries impacting on the Waikato River and the Waipā River. Officers recommend this implementation method is deleted in its entirety, as it would appear to overlap both with statutory requirements, generally accepted good practices for implementing a plan related to water quality and certainly represents business as usual for the WRC. Other than a broad statement of intent, it would appear to have little value in the in PC1.

19	39 and following	3.11.5.1 3.11.5.2 3.11.5.3 3.11.5.4 3.11.5.5 3.11.5.6 3.11.5.7 and associated schedules	Oppose all	Introducing Land Use Consent terms and conditions is unnecessary and an abuse of power due to the nature of the Orwellian rules required to regulate such provisions that do nothing to enhance the rules already proposed for the control and reduction of Nitrogen, Phosphorus, Sediment, and Microbial pathogens.	Delete all of these rules and schedules as appropriate to remove provisions for Land Use Consent terms and conditions. Instead utilise rules for the control and reduction of Nitrogen, Phosphorus, Sediment, and Microbial pathogens.	
20	57 to 67	Attributes table	Oppose part	<p>The objective of PC1 is to restore and protect the health and wellbeing of the Waikato and Waipa rivers for the benefit of current and future generations so that water quality within the Waikato River is safe for people to swim in and take food from over its entire length.</p> <p>The World Health Organization has published guidelines for drinking water quality standards, etc. Objectively WRC should be considering and setting attributes which are consistent with attributes recognized world wide, not a subjective view on what those attributes should be locally.</p>	Ensure that the attributes are consistent with objectively determined world standards, not local standards subjectively determined.	

11. Conclusion

- 11.1. PC1 is a cynical attempt to capture control of Waikato farm land (land use controls) under a rouse. If proper restoration and protection of the health of the Waikato and Waipa rivers, including water runoff or tributaries, is the true intent, then the urban and transport infrastructure would be a serious focus of the plan change.
- 11.2. We can only urge you to be robust in your response to this proposed plan change. Call a spade a spade and do not be influenced by the “PC environmentalists”.
- 11.3. Please reject what does not make sense or pass the smell test. Let common sense prevail.
- 11.4. Empower our Waikato farmers to farm with innovation and passion for the future, without the Damocles sword of RMA strict liability prosecution hanging over our heads in the hands of zealots who have no farming skills, competence or experience.

Charles Fletcher
10 July 2019