

Lake Rotorua Primary Producers Collective

Submission on Proposed Plan Change 10 (Lake Rotorua Nutrient Management) to the BOP Water & Land Plan.



To: The Chief Executive Officer
Bay of Plenty Regional Council
PO Box 364
Whakatane 3158

Date: 27th April 2016

Reference: This is a submission on Proposed Plan Change 10 (Lake Rotorua Nutrient Management) to the BOP Water & Land Plan.

Submitted by: Lake Rotorua Primary Producers Collective

We could not gain an advantage in trade competition through this submission process.

We are directly affected by an effect of the subject matter of the submission that adversely affects the environment and

Our submission does not relate to trade competition or the effects of trade competition.

The details of our submission are in the attached papers.

We wish to be heard in support of our submission. The Collective acknowledge & support the submission from Federated Farmers & our individual members.

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Greater Rotorua District:

Rotorua is a multi-cultural district of 65,280 residents & 10,000 daily visitors.

The city is nestled in a huge, ancient caldera 20km across at its widest point and 16km at its narrowest, with Lake Rotorua nearly 300m above sea level. The total size of the Rotorua district is 261,906ha. The region includes 18 lakes, 800ha of parks, gardens & reserves, 3 major rivers & 7 geothermal fields. 100,000ha of native and exotic forests, 100,000 ha of farmland, & 120 wetlands.

The Collective - Our Purpose

The Lake Rotorua Primary Producers Collective (the “Collective”) was formed in 2011 to advance the interests of rural landowners facing major reductions in nutrient losses from their farms. We have 46 members: 27 dairy farmers, 14 dry stock farmers and 5 rural professional associated members.

The Collective has actively engaged in debate with other community stakeholders to represent the views of our members within nutrient policy. Members have willingly participated in Council & scientific research trials over the past fifteen years, including:

- Initiating the Sustainable Farming Fund Project “Meeting nutrient loss targets on dairy farms” with \$450,000 from MPI, BOPRC, Ballance and DairyNZ .
- Persuading BOPRC to adopt a collaborative path through the Stakeholder Advisory Group.
- Signing the Oturoa Agreement with BOPRC, Federated Farmers and LWQS to recognise the importance of the rural sector in respect of investment, employment, support of local businesses & environmental stewardship.
- We work with BOPRC, Federated Farmers, DairyNZ, Beef+LambNZ and others to protect farm businesses while reducing nutrient losses that affect Lake Rotorua's water quality.
- Successfully lobbying Government, in support of BOPRC, to get a Crown commitment to its share of 50% of the \$45.5 million incentive and advice funding.
- Supporting & participating in the new Sustainable Farming Fund project 'The P Project' advancing on-farm phosphorus loss mitigation in conjunction with applied research on a new mitigation tool the Detainment Bund.
- Members are participating in joint Ag Research, BOP Regional Council, high rainfall nutrient loss trials by allowing the placement of lysimeters over paddocks for the next 3 years and recording necessary farm data.

The Collective has actively engaged with the Rotorua rural community to both inform and collect feedback from pastoral land owners that will be affected by BOPRC's draft Rules to reduce nitrogen losses from Rotorua farms.

The Collective's Position & Relief sought:

- That farming is a science and an art and that many generations of New Zealanders have spent their life times evolving our current understandings of biological processes. That this is an ongoing evolution of better knowledge and that farmers are constantly striving for a more proven way to achieve our desired outcome. First grade food products to be sold on the NZ and International market.
- That the Agricultural Industry has accepted the challenge of better environmental practices and outcomes, consequently there is a huge effort under way nationally to increase knowledge and more importantly to educate farmers. This is a happening process but it will take a little time. Big gains have already been demonstrated all over New Zealand and in this catchment.
- That the science review scheduled for 2017 includes a recalculation of the sustainable load to lake Rotorua and that the nutrients generated from all current land uses are recalculated. Our real concern is that the target load has been 'taken as read' since its inception. That the terms of reference be open for consultation with all stakeholders and that consensus is reached with affected parties.
- That a comparative feasibility and effectiveness analysis of all nutrient mitigation tools & process's available internationally and domestically be published.
- That both nitrogen and phosphorus and different loading levels are considered together within the integrated framework outline suggested in this submission. That nutrient reduction takes account of all the science knowledge, and a greater emphasis is placed on the total bio diversity of catchments.
- That science advice is sought on the effect to the lake of significant change in land use from pasture to plantation forestry having regard to understood N;P ratio's.
- That all the principals, policy's and methods of the RPS are applied in assessing the economic impacts on individuals and community of the integrated framework.
- That farming in the catchment should be maintained as a permitted activity. Land owners operate at or below their bench mark figure and work to reduce nutrient loss from their property.
- The Collective support the concept of Managed Reduction targets, but do not agree with the target numbers, which will be subject to changes from recommendations from the 2017 science review and ROTAN review. It is the mechanism of measurement & enforcement of the managed reduction targets that we wish Council to change. We request that they are not subject to conditional consent but are part of a permitted activity.

- Land owners complete a farm nutrient plan that is informed through engagement with their sub catchment group & in consultation with Industry support (e.g. Beef & lamb's Land information plans and DNZ's/Fonterra sustainable milk plans) or their own farm advisor or Council Land Management Officer. That Industry report on sector progress on a rolling 5 year average.
- That farm plans sit outside all regulatory measures and are used as a living planning tool.
- That the Overseer model is the farm decision support tool in determining nutrients for both planning and compliance.
- That sub-catchment groups are established, driven by community & supported by Regional Council.
- Council acknowledge that the internal loading of the lake does have effects on science data. Council work with Strategy partners to focus on mitigating the legacy internal lake loads
- That the principle of shared intergenerational equity be paramount in considering the impact of PC 10 policies and rules on the Rotorua community within the time lines established by the RPS that Council chose to use.
- That Council acknowledge that effects of new understandings on attenuation now allow for consideration of further management of nutrients along the transport pathways to the lake.
- Collective members participated in the stakeholder consultation process in good faith but the terms of reference were restricted by Regional Council to discussions on an 'Allocation method' for nitrogen discharge allowances.
- PC10 has become a highly prescriptive 'command and control' of farm inputs with intensive monitoring which is the opposite of what staff indicated through out the entire consultation process. Council was adamant and farmers agreed that Council was not in the business of 'telling farmers how to farm' (BOP RDD meeting, 14 December 2015)
- That the gaps in science, economics and land use knowledge flagged by contractors commissioned to write reports tabled to Council are identified & collated.
- That Council facilitate the establishment of sub-catchment community groups which will complete action plans to identify possible nutrient loss solutions for their catchment. That these groups would include farmers, lifestylers, urban communities alongside science expertise and land management support.
- The Collective re-confirm our commitment to the principles of the Oturoa Agreement.

We are anxious to find the right environmental solutions for both water and community. But the solutions must be fair & equitable. They must minimise the

economic costs to farmers and the wider community and be based on sound & robust science that is regularly updated and reviewed. The Collective therefore strongly supports the timely progression of the 2017 Science Review which must as part of the process recalculate the sustainable load to lake and the load from all land use. These figures are fundamental to this whole process and cannot be taken 'as a given'. We believe that taking an evidence-based approach leads to more effective and enduring decision making. There are still many unanswered science questions that need to be addressed. In the past year during the time that these Rules were developed by Council there have been a number of papers that have created new questions about the core beliefs of the lakes biology. Dr David Hamilton's paper on Alum dosing poses further questions to be answered on the differing levels of Nitrogen and Phosphorus in the lake. It must be robust science, good leadership, & planning, not computer modelling that establishes the level of Nitrogen and phosphorus to be removed from the lake.

Rotan and Overseer models: Until very recently it has been stated that there is no attenuation of Nitrogen between the root zone and the lake, and development of PC10 has been carried out on this assumption. Overseer version 6.2 has proved this assumption to be wrong. That attenuation does happen is a major change in our understanding of nutrient loss. During development of PC10 it has been assumed that the only way to achieve the N load target was to control Nitrogen at source. We can now expand the catchment tool kit to include enhancing attenuation of N along the transport pathways to the lake. The scope of PC10 has to be broader to have an enabling framework to include a wider portfolio of options. This is why we introduce the method of establishing sub-catchment groups led by Community and supported by Council to work on Community solutions. This method (number 41&47) is not new, it is already in the operative Regional Water and Land Plan. It has just never been implemented by Council.

Farmers and the sub-catchment communities are willing to identify & work on the "hot spots" and are keen to "get on" with cleaning the lake but not through this PC10 package of rules. The Collective members have a fundamental disbelief in the core aspects (being land use change) of what the Regional Council has offered up as the solution to ensuring no further algae blooms in Lake Rotorua. This is after all the big 'problem' the communities of Rotorua identified as wanting fixed.

Principals:

It is really important that the principles of the Councils own Policy statement, being

- fairness & equity including intergenerational equity,
- extent of immediate impact,
- public & private benefits & costs,
- cultural values,
- doing the least harm,
- taking account of existing land use and capital investment &

- Iwi land ownership are taken into account and are applied when considering the impacts of the rules and the flow-on effects to the wider community from the inevitable reduced farm production, spending and land values.

It is further important that the Principals of the Memorandum of Understanding on the Rotorua Lakes Restoration signed between the Crown & the members of the Rotorua Lakes Strategy Group are also acknowledged and taken into account when considering the impacts of the proposed Rules. The Principles state

- We recognise that the preserving & protecting the Lakes will take a great deal of time, effort & financial resources to accomplish the restoration of the lakes & the water quality.
- We recognise that there are legacy problems that have been created over a long period by actions that had impacts that were often unknown or uncertain.
- We recognise that there are significant financial commitments that will need to be made over time by the parties
- We recognise that the restoration of the Lakes will require adaptive management where actions and approaches may change as our understanding of the lakes change with future research.
- We recognise that the time frame to implement actions to address Lake restoration is likely to exceed 10 years and that recovery in some lakes will take longer.

Relief sought: The introduction of the National Policy Statement on Freshwater management has provided an ideal opportunity for Council to go back to the Communities of the Rotorua District and have a more informed discussion about the current science of Lake Rotorua, and the resulting cultural, economic, social and environmental impacts of various options, costs & achievability for improving the lake. We ask that Council confirm that the Lake Rotorua Catchment will be part of a Water management area subject to the provisions of the NPS- Freshwater in 2020.

Relief sought: The Collective suggests that restoration of Lake Rotorua is a whole-of-community challenge. That all sectors of the community should be expected to implement reasonable, practicable, & affordable measures to avoid, remedy or mitigate nutrient losses.

Relief sought: The RPS is clear that if the lake requires further nutrient reductions to remedy the legacy issues so that the lake can meet the community values and objectives then this carries public benefit and should be funded accordingly.

Economic Impacts & the Section 32:

The recent amendments to Section 32 of the RMA now requires Local bodies to complete a more robust, more clearly articulated analysis of proposals for-

- appropriateness in achieving the purpose
- quantification of costs, benefits & risks to the community, the economy & the environment must be clearly identified and assessed.
- The analysis must be documented, so stakeholders can understand the rationale for policy choices.

We note that the Decisions Report on the RPS recorded that the cost-benefit analysis was at a “*conceptual*” level; and that the PC10 S32 report records that it is intended as a “*record of the policy journey*” and not as a rigorous cost-benefit analysis of options. The section 32 only gave a summary of the process of seeking a solution to the identified problem.

Relief sought: We are concerned that the full social, cultural, economic and risk effects of the proposed rules have not been investigated or quantified nor advised to the community that will be the most affected.

The section 32 report states-

10.2.4 “*Some options were eliminated as not suitable. A key consideration was retaining flexibility for farmers to manage the adjustment to a low N leaching farming system, without the Council telling farmers how to farm. There was also a desire to encourage innovation within the pastoral sector*”

11.7.1 “*prescriptive input-based regulation: this option would not be effective in achieving the environmental target with certainty, and would not incentivise efficient resource use*”

Relief sought: We ask how this position is consistent with the policies & rules that Council has notified in PC 10?

Appendix 4: “*Reducing N discharges will generally be easier and cheaper where it can be achieved by farm management changes rather than land use change*”

Relief sought: We ask what report this cost-benefit analysis is reported in and why then is Council's main focus to drive land use change?

Appendix 4: *“the rules will have varying impacts – those people whose livelihoods are tied to their properties may be most impacted. The impacts on profit are distributed unevenly across sectors, land uses and geophysical zones. Reduced profitability may make it difficult for farmers to service debt, and decreased land values associated with N restrictions may mean that for some farmers, debt will exceed equity”*

Relief sought: Admission that Council is fully aware they will be affecting land values, profitability and sending some farmers into bankruptcy.

Appendix 10; *'Implementation Costs – processing returns, checking Overseer files, quality control on nitrogen management plans, monitoring and compliance.'*

Total implementation costs are just under \$700,000 of which 80% are for administration (5.5 positions), & 20% for 2.4 Land Management Officers.

Relief sought: We feel Council have wrongly placed all emphasis on compliance and little on resourcing the community to achieve the job Council is responsible for facilitating. We ask that Council reverse the order of priorities and focus on solutions beyond the office walls.

Many rural people view the RMA process that has led to the current proposed Rules even being debated as fundamentally flawed. The setting of the target for the sustainable nitrogen load to lake Rotorua in the Regional Policy Statement was done without the majority of the community having any understanding of the likely economic and social impacts to them personally or their community. This was evidenced when engagement with small block owners and drystock farmers finally happened and they conveyed their dismay in huge numbers to Council. It is understood that the Section 32 analyses that have been done are limited in scope, and farmers view this as far too late in the process, that it should have been undertaken before the sustainable nitrogen load target was set. We appreciate that the RPS target is outside the scope of the current proposed rules process.

Relief sought: It is our view that the science review or a more complete section 32 should also include an appropriate focus on the economics as well as physical sciences and that this is used to inform policy.

It is also our concern that Council went through a 'feedback process' on the Rules back in October 2014, over 300 people gave their views on the nutrient reduction process. Council compiled a report of submitter recommendations but changed nothing in their planning other than to extend the timeframes for owners of smaller land parcels becoming regulated as an appeasement because they had not known they were affected parties in this issue.

Relief sought: Council's ability to communicate with the wider stakeholder community has been ineffectual, we want this remedied.

The community want to know what potential impact lower property valuations and lower productivity will have on their community. How many land holdings & businesses are at risk of liquidating? What is the projected reduction in weekly cash flow through the city given that it is well documented that every dollar farmers spend circulates four times through the wider business sector? The Farmer solutions Project report estimates the cost to pastoral farmers of the new rules to be over \$88 million not taking account of loss of capital & not factoring in debt and interest. This fact cannot be ignored in a community that already has zero growth.

Relief sought: Quantify the economic cost to small business the community and individual farmers.

Council recently reviewed an economic report looking at the effect of the proposed rules on different farming systems. Two of the modelled scenarios were real farm systems located within the catchment. The summary stated that impacts on half of the farms is likely to be devastating. Yet Council still proceeds with the current Rules program in light of evidence they will be bankrupting a significant number of farming business's.

No farms have been able to complete the farm plan process Council has dictated, thus none can obtain an understanding of the impacts of the rules on their properties. We have had members who have been engaged in the process for over a year and still do not have completed farm plans that can show how they may attain their 2032 pNDA target. Because of this all our farmers are 'flying blind' on the true economic & farm system effects to their properties. The process is further exacerbated when the farm pNDA figures change monthly.

Land owners are not able to make informed submissions to this Plan Change as they do not understand the full effect of the consequences.

Relief sought: Defer PC 10 adoption until land owners can fully understand the consequences of the rules and have the ability to make informed submissions to council.

Evaluation of profit changes due to N loss reduction and current position of farms:

Evidence from a preliminary case study of five Dairy farms in the lake catchment (completed by DNZ and reported by them separately) showed four of the five farms have Nitrogen losses, measured by Overseer significantly below their 2001-2003 benchmark. (Farmers are doing their bit.) The economic analyses show that there is not a straight line relationship between N loss reduction and Profit and the correlation varies on every farm. Of the farms modelled what is consistent is that there is an ever increasing rate of profit loss per percentage of Nitrogen reduction.

Relief sought: That the economic impacts of individual properties is fully understood as per s85 of RMA before implementation of PC10

Science:

Relief sought: The Collective request full disclosure of the analysis of all other options beside that of the rules framework that have been explored to enable a reduction in nutrients to the lake. If this has not been done then we request that it be part of the science review in 2017.

Nitrogen in the lake water is not causing any environmental impact on the water quality of Lake Rotorua currently. A lake that has been stable for 12 years is significant and should inform policy. It also means that the law makers can take sufficient time to make absolutely sure the path they are travelling on is the right one as this policy will not be easily altered once it is enshrined in law, the effects on individuals and their communities are huge. These Rules will affect peoples lives, and the lives of their families & employees. The effects of the rules will be irreversible for much of the land around Rotorua so when it transpires that the figures were wrong or there was another way to restore the lake that had less social & economic consequences, it would be dishonourable for Councillors to have not considered all the options, prior to the rules being implemented. The ongoing current TLI gives Council a chance, before it instigates irreversible change and damage to the Rotorua economy, to pause, complete the science review and develop a better way.

Relief sought: Council take time to pause and most importantly review the different directions the Lake Rotorua nutrient debate has followed. Are we still on the most efficient, effective and affordable pathway. The TWLP method 41 was developed for a reason and seems to have got lost along the way.

The time frame that has been set (15years) to restore the lake is not fair or equitable to current land owners nor does it take account of the intergenerational principal given that the current water quality issues were mostly created by decisions of past community leaders, as acknowledged in the Memorandum of Understanding between the partners of the Lake Strategy group. It is interesting to note that the Waikato Regional Council has decided to allow 80 years for restoration of the Waikato catchment as they feel it took that long to degrade it.

Relief sought: That further consideration be given to the time line for expectation of results.

Since the RPS was first notified, our understanding of what drives water quality in Lake Rotorua has changed significantly. Rotorua has experienced a long period of rapid improvement in water quality. This rule process has focused only on long-term management of nitrogen, with little attention paid to phosphorus. Dr Hamilton has presented evidence that the lake is now highly phosphate-limited. Since the very beginning of this process, the

members of the Collective have strongly advocated that the most effective approach to delivering the desired community outcome is to aggressively tackle phosphorus in the short-term, with a longer-term commitment to reducing nitrogen loads that recognises that it has taken a century to reach the current state. Alum dosing is currently delivering this outcome. The Collective is concerned that the public are being led to believe the option of continued alum dosing is not available, when there is no current science either in NZ or internationally that shows any ill effects from continued dosing. At present, community knowledge about how alum dosing works, the quantities involved or the risks is non-existent.

Relief sought: The Collective requests that significant resources are invested in research to determine the true effect of this process matched under local conditions before any decisions are made.

The proposed rules focus on N reduction, it will take many decades after 2032 to have any effect on lake water quality. The likely result of the focus on N is a drastic decline in water quality in the medium-term.

Relief sought: Council adopt a more adaptive management approach, like using alum dosing but changing strategy if there is any sign of negative environmental consequences emerging.

Relief sought: The Collective requests acknowledgement of the effects in the quality of the lakes water from the environment work completed on pastoral land before the bench mark years of 2001-2004. There have been many streams and 'at risk' areas of land retired, fenced and planted at farmers own cost. There has also been land retired for ecological reasons from which there will never be an income stream, unlike land planted in production forest which will ultimately be harvested. As retiring land is very clearly a public good and a gain to the lake it should be incentivised. Under the proposed Rules these land owners will be heavily penalised while land owners who have no retired areas benefit from a higher nitrogen discharge allowance.

Attenuation of Nitrogen:

There are significant losses of N out of soil water. There are many different flow pathways and attenuations when looking at Nitrogen and its journey from land source to streams and lakes. Attenuation can vary from 29% up to 75% (As reported by Dr Ranvir Singh Massey University.)

Key findings of research so far. (Dairy Exporter March 2016)

- Nitrogen loads measured in rivers are significantly smaller than estimates by Overseer.
- The difference in those figures is likely because of the nitrogen reduction process that happens in the subsurface.
- The capacity of land for de nitrification is variable

When the 435 Nitrogen load was first suggested and incorporated into BOPRC plans and the proposed rules were first formulated it was stated

that there was no Nitrogen Attenuation in lake Rotorua's catchment as the measured loads were the same as modelled outputs from farm land using overseer version 5.4.

Subsequent versions of overseer (Version 6.2) have indicated almost twice as much N leaving the farming area but loads to lake are of the same magnitude therefore there must be attenuation. Massey university studies show that different soils and catchments have significantly different attenuations. That there is scope to improve attenuation (denitrification) so the amount of N reaching receiving waters can be significantly reduced without having to change land use. This work also shows that different catchments will have different loadings to the lake from the same or similar land activities. Also some areas should be targeted before others to get the most effective and efficient reductions. The proposed rules treat all land in the catchment the same regardless of location, soil type, proximity to lake and ability to attenuate N.

Relief sought: Council acknowledge that there is now new understanding of the science related to attenuation. That this new knowledge allows for new management process of Nitrogen along the transport pathways to the lake.

Trading & Incentive Fund:

The Collective supports the establishment of the Incentive Fund, and is concerned that the narrow terms of reference coupled with an extremely tight budget are making it difficult to deliver an enduring solution for the lake. To that end we support the proposal from Federated Farmers that discussions are initiated with the funding partners to explore widening the terms of reference to include community wide mitigation solutions that could be identified from sub-catchment action plans. Surely so long as the lake is the benefactor long term it does not matter how the nutrients are obtained.

Relief sought: Council explore with strategy partners and the crown that the Incentives Fund and PC 10 should provide an enabling framework for a wider portfolio of nutrient reduction strategies to include community wide mitigation solutions.

The Collective supports the establishment of trading as a tool to allow land owners to meet the staged reduction target. Trading should not be restricted to after 2022.

Relief sought: In addition to trading of long-term allowances, we would like to see provision for the leasing of nutrient allowances. This is likely to increase flexibility and market efficiency, as well as reduce the compliance burden for BOPRC by enabling short-term fluctuations to be resolved with short-term nutrient trading.

Farm Environment Plans:

The Collective is supportive of measures to improve environmental performance within a holistic farm planning framework. This is essential to avoid "Overseer myopia" where only the actions measured in Overseer are considered.

Farm management plans should be a tool to help a farmer plan and measure different mitigation solutions. They must not be part of any regulatory process nor the compliance regime. Agricultural science research is continually coming up with new advice. Our professional industry bodies are continually changing their advice and message to us. Our international markets are constantly improving the standards they require. Compliance for both District and Regional Council's change. A farm management plan needs to be a living document that is visited regularly with our advisors. It can not be a piece of paper that is written today and filed for the next 20 years, so incorporating it with any consent does not make sense. Neither will a farmer want to show and explain this plan to council staff on a regular basis. Council cannot expect to micro manage private business. All that is required for assessment of the output of nutrients from a property is the Overseer nutrient budget most farmers complete with their preferred fertiliser company or farm advisor.

For example, Dairy NZ now has a project under way delivering Sustainable Milk Plans to all farms in the Rotorua catchment. These will contain all the information about best practice which is relevant to a farmer's individual goals. Many farmers are also likely to develop even more complex whole farm business plans which include even more in-depth information, none of which is essential to regulatory compliance.

Relief sought: That Council change the definition of 'Suitably qualified and experienced person' to read a person who implements Overseer input best practice, has completed both the intermediate & advanced courses in 'sustainable nutrient management in NZ conducted by Massey University and has at least five years work experience in land use or farm advisory.

That Council discard the prescriptive input-based management currently proposed and that Farm Management plans sit outside all regulatory measure & are used as a living planning tool.

Compliance:

It is important that compliance procedures provide a good degree of flexibility. Farming is a science and an art, planners tell us that science is not exact, it shows trends, yet they expect us to account for biological systems down to the last mathematical point.

Recognising that Overseer is a long-term averaging model, not designed to calculate nutrient flows on either a daily or even annual basis, the

Relief sought: Collective request that rolling averages across 5 years should be applied to all data. This is the industry standard. It allows trends to show more accurately.

Each dollar spent on consents, compliance and administration take us further from the goal of a clean lake and a sustainable community. It is essential that compliance costs are kept as low as possible and able to be met by both farmer and the urban wage worker (lifestyler). The system Council has designed will result in huge annual fees both for consent inspections and administration. They have employed a whole new team of people to implement and enforce these unnecessary rules. Their time and wages will be paid for by our community.

Relief sought: That Industry report on sector compliance progress on a rolling 5 year average.

The rules package NDA is based on Overseer figures then these are turned into detailed farm plans with specific actions which are then measured again using the Overseer model. To simplify compliance and allow for adoption of new technology, the compliance 'ruler' has to be the Overseer model figures.

Relief sought: That the Overseer model is the farm decision support tool in determining nutrient values for both planning and compliance.

Overseer:

Overseer is recognised as world leading in modelling our pasture based farming systems. But as stated above our biological systems are very complex and cannot be precisely measured to the decimal point.

Farmers need training in Overseer, the only tool Industry has accepted as suitable for planning. There has not been an Overseer 101 or training course for farmers available to date. The industry is working on refining a training package and the Collective have registered their strong interest in hosting a training session as soon as the refinements are completed. Understanding how Overseer is used and the protocols that go with it is paramount in finding appropriate on farm mitigation solutions.

Relief sought: Council support farmer education in the Overseer model.

Lake Rotorua catchment must have more Overseer input data calibrated to local conditions, not uniform national input data that averages the whole of NZ. Our topography, high annual rainfall, soil types & sunshine hours create a unique growing environment that must be accurately reflected in measurements of farm systems and the impacts that whole system has on the environment. Collective members are actively engaging in research trials as stated in the first section. This improved data will not be available for inclusion in Overseer for at least 5 years but once qualified can be incorporated into Overseer and revised farm plans very quickly if they sit outside a micro managed compliance scheme.

An additional concern is that any approach utilising OVERSEER should be undertaken based on OVERSEER prepared in accordance with national best practice data input standards to ensure consistency of approach. It is a principle needed for consistency and reproductability the national Overseer best practice standards must be applied.

Regulatory Process:

It is our belief that these precriptive regulations will reduce innovation and drive behaviour not conducive to sound environmental practices. It is also our belief that there are too many big questions around the Lake biology, nutrients & the current proposed program to require anyone to be locked into a conditional consent that requires actions and land use changes that could alter following a NPS and science review.

Collective members have contributed to a report prepared by Perrin Ag that demonstrated nutrient loss reduction achieved since bench marking, by way of voluntary contributions with out consents. The results showed an impressive trend & demonstrated that farmers were taking the nutrient reduction debate seriously. A more recent report completed by DNZ and presented to you by them also demonstrates that famers are engaged in sustainable best practice methods and are very serious about their environmental obligations.

NZ Farmers work closely with their industry partners, we pay significant levies to these partners to undertake research and development on our behalf. We actively participate in discussion groups, training days and workshops. (The Mamaku/Kaharoa DNZ discussion group is one of the biggest in the central NI). Beef and Lamb also host on farm discussion groups to facilitate educational discussion on system improvements. It is in our best interest to absorb and implement the industry messages on science, biology and farm systems. This is how Industry 'Best Practice' standards are achieved on farm, by ongoing research, education and observation of results.

Relief sought: That farming in the catchment should be maintained as a permitted activity. Land owners operate at or below their bench mark figure and work to reduce nutrient loss from their property.

Allocation & Managed Reduction:

Agreed principles, values and good scientific analysis must drive any allocation of nutrients within the catchment. Investigation of all allocation options has resulted in the Stakeholder group recommending that 'Sector Averaging' is the most appropriate option for this lake catchment.

Relief sought: The Collective endorses this allocation method but only until 2022 when further policy will be informed by the science review to be started in 2017.

The Collective supports the concept of Managed reduction but expect the figures to alter following the Rotan & science reviews. We would also like to remind Council agreement was for proportional reduction of the catchment figure, not individual farm figures. Agreement was also only for 2022 not 2027.

Relief sought: Council change the mechanism of measurement & enforcement of the managed reduction target.

Lake Internal Legacy Load:

The PC10 S32 report records that the TLI target has been subject to review and confirmation since it was established. Reports show that this target has been 'taken as read' in all subsequent reviews. Further to this the TLI parameters assumed no internal nutrient load. The legacy load within the lake contributes 360 tonnes of N that can be released up to 10 times a year i.e. up to 3600 tonnes per annum. With the land based reduction of 311 tonnes (less than 10% of the internal load) then all the costs of mitigation and of land use change would be money and effort wasted if the internal load is not addressed and not factored into calculations. The unexpected turnaround in the lake TLI subsequent to alum treatments in two streams is significant in highlighting the ongoing importance of internal nutrients and phosphorus as a key driver of algal dynamics in Lake Rotorua.

Relief sought: Council acknowledge that the internal loading of the lake does have effects on science data. Council work with Strategy partners to focus on mitigating the legacy internal lake loads.

Ground Water – Legacy Loads:

Rutherford's Rotan review in 2003 found an increasing trend in baseflow nitrate concentration in eight of the nine major streams from 1968-2002 and suggested that nitrate generated from land clearance 30-70 years ago might be finding its way into streams from deep ground water.

The report recommended

- 'given evidence of a widespread and significant increase in baseflow stream nitrate concentration, it is desirable to make a more detailed study of catchment nutrient loads'.
 - the contribution from storm flows and particulates
 - transport pathways for the delivery of nitrate and the time delays involved
 - opportunities to intercept nitrate
 - opportunities to reduce nitrate generation
- 'If this information were available it would be possible to determine where mitigation measures could be located in the catchment where it is easiest, for economic or social reasons, to reduce/attenuate N exports'.

It is on the basis of this report and others that the Collective supports the establishment of sub-catchment Community groups that are charged with establishing the four aspects he recommends.

Relief sought: There are also still significant concerns about the gaps in the understanding of how groundwater behaves. BOPRC needs to clearly communicate what the science gaps are and what the strategy is for addressing them.

Relief sought: Does BOPRC have any current science data on the nutrient loading from today's farming systems of ground water reserves under pastoral catchment farms. The only science analysis done is when water arrives at the surface inflows to the lake. Science has long ago proven that there is a time delay of between 50-120 years in the ground water from various springs into rivers then to the lake so surface testing is of water from the 1920-1960's land use.

There is no scientific analysis of nutrients in ground water from current farming practices! Trials have only been initiated this month to determine some of this information and it will be up to five years before there are any conclusions reached.

Relief sought: BOPRC need to engage better with the land owners that have only recently been captured within the extended lake Rotorua ground water catchment. They must supply irrefutable evidence as to the flow of their ground water given that their land is outside of the surface catchment for Lake Rotorua, with their surface water running to the Waikato. There has been little communication from Council with most of the land owners information coming from one public meeting arranged by the Collective. The figures for stream flow and land catchment didn't add up, Council determined that there had to be further land area that must be contributing to ground water that lay outside the surface catchment. The company commissioned to investigate advise that the results they came to were their 'best guess'. There has been no science work done to determine the new boundaries, no consultation with local residents about water movement. They spent a day looking at maps and the lay of the land.

The implications for land owners of being captured within the ground water boundary are huge. They become subject to the proposed rules with all the bench marking, nitrogen discharge allowance allocation, consents and compliance of reductions.

Relief sought: The Collective feel that due diligence has not been done for these farmers. Council must commission a scientific way of proving the direction the ground water travels.

Targets:

Over the last five years while PC10 was under development, Overseer version 5.4 was used to estimate nitrogen loads for both farm and catchment. The Rotan load estimates (i.e. the amount of N coming from land use) published in 2011 used the Overseer version 5.4 and achieved a similar match to the measured stream concentrations if zero attenuation was assumed. It is now known that this is not correct and that Attenuation could be as high as 75% in some area's. This is an argument for another chapter. What is concerning is that the target figure for the sustainable load to the lake that the Council is using in its proposed Rules program and stated in the RPS was set with the protocols of version 5.4. This point is quite significant to this RMA process. All the other nutrient figures from catchment and farms are now calculated with the protocols of version 6.2. Council has created a mathematical equation to try and convert the 2005 farm bench mark figures through several version changes to give some relevance to the figures farmers are working with today, as 'current state' of farming practice based on Overseer 6.2. But again the Sustainable load target of 435 t Nitrogen comes from work completed in Overseer 5.4. The accuracy of the figures has become quite distorted yet Council intend holding an individual farmer liable to attain a single nitrogen discharge figure from their land.

For example: a dairy farm with 280 cows was given an Overseer 5.4 bench mark (2005) figure of 64kg N/ha and told they had to reduce to 38kg N/ha (2032) to achieve the 435t N in the lake. In Overseer 6.2 the benchmark is 99kg N/ha and they have to reduce to 61.3kg N/ha to achieve the same 435 t N in the lake.

Relief sought: Council acknowledge the significant shifts in load estimates from Overseer version 5.4 to version 6.2 along side catchment attenuation; that Rotan estimates of catchment loads are currently being revised; and that this revision will necessitate review of the RPS load numbers and load reduction targets.

A further point relating to the targets: acknowledging Councils repeated assurances that “science says”, we respectfully make the point that the task of landing objectives and limits on behalf of their communities is not the responsibility of the scientists. The RPS, RLWP, NPS-FW are instruments of the RMA and it is clear that the final decisions of policy– while they absolutely must be informed by the best science available – must be made by those charged to look after the interests of the entire communities they lead.

Reference Files:

Council have created another averageing modelling system to save themselves time and administration to help solve the on going problem of Overseer being updated regularly. This has been done by BOP Regional Council alone and not by the owners or managers of Overseer. This model has already been shown to have referencing problems. Another new Overseer version has been released 6.2.2, the reference file was up dated then all farm files converted through the reference system. Some farms were then shown to be technically non compliant even though they had changed nothing on the farm. The problem was found in the reference model in that the model did not cover all farm systems. There are only 98 farms over 40ha in the catchment yet Council chooses to use a model that will not acknowledge individual farm mitigation actions accurately. Reference files undermine the value and virtues of Overseer as a farm decision support tool, and as a tool for tracking progress across the catchment.

Relief sought: Council discontinue using reference files and use the industry accepted & approved Overseer model for all farm nutrient calculations.

Land Use:

Council have often stated that agricultural land use has intensified over recent decades. They have not offered any proof to substantiate this claim. A report they commissioned entitled 'Land Use Analysis' shows that there has been a change in 1600ha of productive grasslands converted to forestry during the period 1990 – 2012 in the Rotorua catchment.

Between June 2002 and June 2013 statistics show that in the **Bay Of Plenty region**

total beef cattle numbers dropped by 41,831, that

total dairy cattle numbers dropped by 16,731 and that

total sheep numbers dropped by 102,786.

<http://nzdotstat.stats.govt.nz/wbos/index.aspx?DataSetCode=TABLECODE7423#>

Relief sought: Council produce a comparative analysis of change in land uses from 1990 until current day for the Lake Rotorua Catchment that shows the difference in land use and stock numbers to inform the land use load to the lake.

Oturoa Agreement:

The Oturoa Agreement signed by BOPRC, Federated Farmer and the Lake Rotorua Primary Producers Collective agreed to a collaborative relationship. The parties agreed principles and core intentions -

- The parties recognise the importance of a clean and healthy Lake Rotorua
- the parties recognise the importance of the rural sector to the Rotorua economy
- The parties are committed to reducing nutrient emissions from land use in the catchment
- The parties agree that the Collective with support of BOPRC and in collaboration with industry research organisations will work with farmers to develop individual farm plans and collective solutions to meet nutrient reduction targets

Relief sought: We request that Council work with us to solve the problems of our lake by adopting the new proposed integrated framework that will allow farming to remain a viable industry and not forced into land use change to satisfy a rules regime.

Integrated Nutrient Management Framework:

A new nutrient management framework is outlined in the next section. The framework is not based on “command-and-control” or “telling farmers how to farm” or the forced conversion of 40% of Rotorua farmland into pine forests.

The framework respects the history of land use change over the last 100 years, respects the complexity of Lake Rotorua dynamics, and respects the shared commitment of all parties, including landowners, to do a better job of looking after the lake.

The framework is non-regulatory: the scale and complexity of the challenge demand generous engagement, not grudging compliance. The primary role of Council is providing an enabling framework to engage all stakeholders.

It acknowledges progress, and the investments already made on catchment farms. It includes an expectation of industry leadership and resourcing to support continued uptake and implementation of on-farm best practice. The focus is reducing nutrient losses from current land use at source.

Importantly, it includes the active resourcing of Sub-catchment Action Plans, to map hotspots significant at catchment scale and to prioritise nutrient reduction opportunities along the source-transport-sink pathway. Our expectation is that these Sub-catchment Action Plans would help give effect to the higher-level Lakes Action Plan; and that they would provide a forum for the active engagement of all sectors of the sub-catchment community – farmers, life stylers, urban communities – alongside Council science expertise and land management team support.

Integrated Nutrient Management Framework

Key elements of the framework are, firstly, that it is an integrated framework; secondly, that it provides for tiers of responsibility; and thirdly, that it is staged in the spirit of adaptive management.

Integrated nutrient management framework:

- Nitrogen and Phosphorous
- Rural and urban
- Source and transport and sink

Tiered nutrient management framework:

- **Enterprises:** focus on mitigating **current** land use at **source**
 - urban responsibility for “best practicable option”
 - rural responsibility for “reasonable/practicable/affordable” best practices
 - **Industry** in the lead on best practice development/extension, one-on-one farm plan support, and reporting sector progress
 - Overseer nutrient budgets used as farm decision support tool and to assist monitoring the direction of change relative to industry benchmarks
 - farm plans used as a tool to identify and prioritise farm nutrient hotspots
 - farmers own their own farm plans and nutrient budgets; entering data and testing scenarios with their industry reps or farm management consultants
 - progress tracked partly against Overseer estimates plus progress against farm plan milestones
 - **Farmers pay** to do what’s needed, e.g., best practice farm system/breeding stock/stocking ratios/feeding regimes to reduce nutrient losses; while maintaining compliance with Rule 11, FDE rules etc.

- **Sub-catchments:** focus on attenuating **legacy** loads along the **transport** pathways
 - prioritise sub-catchments on rolling programme to develop sub-catchment action plans,
 - identify/prioritise sub-catchment nutrient hotspots, e.g., N/gorse, P/RLTS
 - in sub-catchments dominated by nutrient rich legacy groundwater, prioritise options for attenuation, e.g., springs/wetlands/riparian; continue alum dosing in selected streams
 - in sub-catchments dominated by flood flow particulate nutrients, prioritise options for mitigating, e.g., sediment bunds, retiring the back gully, putting blocks into trees
 - Use models to help prioritise; then ground truth with science tools, e.g., LIDAR; and with landowners, e.g., the lay of the land and the opportunities
 - **Independent** coordination, e.g., NZLCT; supported by science, e.g., Richie McDowell/AgR/P hotspots, Chris Tanner/NIWA/constructed wetlands; plus council LMOs; plus sub-catchment committee of landowners/life stylers/urban
 - **Incentives Fund pays** for best-bang-for-buck enduring solutions; either permanent land use change or “green” infrastructure or to enable farm reconfigurations
 - Develop flexibility mechanisms, e.g., TDRs, baseline-and-credit trading, offsets for new entrants/developments

- **Lake:** focus on mitigating **legacy** internal load, i.e., the **sink**
 - prioritise interventions to improve ecological health and recreation/aesthetics
 - **Science** to the forefront, develop integrated modelling capability
 - Improve understanding of values, including competing values, e.g., indigenous fish versus trout
 - Improve understanding of nutrients/invasive plants/cyanobacteria dynamics
 - Develop long term solutions for managing internal nutrient loads
 - Continue selective harvest of summertime lake edge weed to improve aesthetics
 - **BoPRC** in the lead, reporting to the Rotorua Te Arawa Lakes Strategy Group

Relief sought: Council adopt this framework and facilitate its implementation with stakeholders and affected parties.

Plan Change 10: Lake Rotorua Nutrient Management

In Reference to Part 2 LR Lake Rotorua Nutrient Management: Page 1

The Collective's specific concerns with the Plan Change 10 document are list as follows:

Using ~~strike out~~ for deletions and underline for additions requested -

Table LR 1 The Collective does not agree with the 320tN recorded as the reduction target. The RPS records this figure as 281tN therefore all other figures are affected.

Table LR2 As above figures affected.

Table LR3 As above figures affected.

Page 5: Objectives

Amend:

Reason: for completeness and accuracy.

Relief Sought: amend as follows:

~~No new objectives are required because the following objectives from the Operative Regional Policy Statement and Operative Regional Water and Land Plan already establish the freshwater objectives for Lake Rotorua.~~

The objective requires that water quality be 'maintained or improved' to meet the TLI.

Lake Rotorua has met the TLI objective in recent years.

These objectives will be subject to review in the Rotorua Lakes WMA – currently scheduled 2020-2023 – which will review values, objectives, limits and methods, including for Lake Rotorua.

New Objective LR xx: The productive potential of the Lake Rotorua catchment rural land resource is sustained and the growth and efficient operation of rural production activities are provided for.

New Objective LR xy: recognise the multiple values of natural and physical resources by aligning interventions to achieve multiple environmental, social, cultural and economic

objectives within a long-term strategic approach

Page 5

Provision: Policies LR P1 to LR P17

Amend:

Reason: to give better effect to RPS and RWLP objectives and policies and for internal consistency.

Overseer 6.2 values should be deleted, and substituted with version 5.4 values to be consistent with the RPS quoted figures

Relief Sought: amend as follows

- Policy 1 To reduce nitrogen losses ~~from land~~ to Lake Rotorua to support achievement of the Lake TLI objective, ~~and achieve the 2032 sustainable lake load 2022 managed reduction target as required by established in the Regional Policy Statement~~ and to monitor this target through science and policy reviews.
- Policy 2 To ~~manage~~ reduce phosphorus loss to Lake Rotorua to support achievement of the Lake TLI objective ~~through the implementation of management practices that will be detailed in Nitrogen Management Plans prepared for individual properties/farming enterprises, and to monitor this target through science and policy reviews.~~
- Policy 3 To ~~recognise the balance between certainty and~~ improve the use of best science and good environmental data in the management of nitrogen nutrients within the Lake Rotorua groundwater catchment ~~by using: developing integrated catchment models which account for all contributing sources of both nitrogen and phosphorous including internal lake loads; and by improving the use of sub-catchment data to inform effective and efficient nutrient reduction strategies~~
- (a) ~~the 435 tonne sustainable annual nitrogen load for Lake Rotorua from the operative Regional Policy Statement Policy WL 3B(c); the 435 tonne sustainable annual nitrogen load for Lake Rotorua from the operative Regional Policy Statement Policy WL 3B(c);~~
- (b) ~~the 755 tonne load to Lake Rotorua estimated by the ROTAN model in 2011 as the position from which nitrogen loss reductions will be determined;~~
- (c) ~~OVERSEER[®] 6.2.0 for nitrogen discharge allowance allocation purposes; and~~
- (d) ~~the pastoral sector reductions within the Integrated Framework approach.~~
- Policy 4 To implement adaptive management in the management of nitrogen nutrients within the Lake Rotorua groundwater catchment through:
- (i) science reviews set out in Method LR M2 and subsequent consideration by Council of recommendations;
- (ii) regular reviews of the Regional Policy Statement and Regional Water and Land Plan objectives, policies, rules and methods under the Resource Management Act 1991;
- (iii) ~~five year individual on farm Nitrogen Management Plan review time frames; and~~

(iv) ~~the use of OVERSEER[®] reference files and proportional requirements to reduce the variability for individual property nitrogen targets.~~

(V) Implementing the Rotorua Lakes WMA to give effect to the NPS-FW 2014

- Policy 5 ~~To achieve the support achievement of Policy LR P1 the RWLPTLI objective sustainable load to Lake Rotorua by allocating nitrogen discharge allowances managed reduction targets across all contributing sectors; including to dairy and dry stock activities within the Lake Rotorua groundwater catchment in accordance with (Table LR 4) subject to further work on dairy support; and to recognise standard OVERSEER[®] 5.4 loss rates for plantation forestry, bush/scrub and house blocks.~~
- Provision / Relief Sought -The table LR 4 Allocated nitrogen loss rates to sectors be corrected to show Overseer 5.4 values.
- Policy 6 ~~To determine individual Nutrient Discharge Allowances that must be achieved by 2032 in accordance with Schedule LR One for all properties/farming enterprises that are not provided for as permitted activities by Rules LR R1 to LR R7~~
- Policy 7 ~~To enable the authorised transfer of nitrogen loss entitlements-increases between properties/farming enterprises from 1 July 2022 through flexibility, transfer and trading mechanisms to encourage efficient outcomes, e.g. transferable development rights, offset mechanisms , baseline-and -credit trading schemes; mechanisms for recognising management practices and innovations which are not in overseer; and making provision for collective consents for multi-property nutrient reduction proposals~~
- Policy 8 ~~To require encourage whole-of-community engagement by enabling sub-catchment property/farming enterprise specific Nitrogen-Nutrient Action Management Plans and require support the implementation of mitigation actions to achieve and maintain Managed Reduction Targets (five-yearly nitrogen loss reduction targets) and Nitrogen Discharge Allowances.~~
- Policy 9 To allow as a permitted activity:
- (a) All land uses until 30 June 2017 provided that the land uses do not increase their nitrogen loss.
 - (b) The use of land for plantation forestry and bush/scrub and constructed wetlands and sediment detainment bunds
 - (c) The use of land for farming activities on properties/farming enterprises 5 hectares or less in area from 1 July 2017 provided there is no intensive land use.
 - (d) The use of land for farming activities on properties/farming enterprises greater than 5 hectares in area or between 5 hectares and 10 hectares or less in effective area from 1 July 2017 provided there is no intensive land use.
 - (e) The use of land for farming activities on properties/farming enterprises between 10 and 40 hectares in effective area from 1 July 2017 to 31 June 2022 provided there is no increase in nitrogen loss and the information keeping and reporting conditions are met.
 - (f) The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment not previously managed by Rules 11 to 11F from 1 July 2017 to 31 June 2022 provided there is no increase in nitrogen loss and information keeping and reporting conditions are met.
 - (g) The use of land for farming activities on properties/farming enterprises that can demonstrate low nitrogen loss.

(h) The discharge of nutrients onto or into land provided the land use associated with the discharge is authorised under Rule LR R1 to LR R11

Policy 10 ~~To require resource consents for:~~ To allow as a permitted activity provided managed reduction targets set in accordance with Table LR 4 are met

- (α) The use of land for farming activities on properties/farming enterprises over 40 hectares in effective area from 1 July 2017
- (β) The use of land for farming activities on properties/farming enterprises between 10 and 40 hectares in effective area from 1 July 2022
- (γ) The use of land for farming activities on properties/farming enterprises less than 5 hectares in area or that are between 5 hectares and less than 10 hectares in effective area that are not low intensity land use from 1 July 2022.
- (δ) The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment not previously managed by Rules 11 to 11F that are not low intensity land use from 1 July 2022

Policy 11 ~~To classify land use consent applications for farming activities that submit a Nitrogen Management Plan demonstrating the achievement of Managed Reduction Targets and Nitrogen Discharge Allowances by 2032 as controlled activities.~~

Policy 12 ~~To classify as non-complying activities, farming activities that require a land use consent application to be made and that do not submit a Nitrogen Management Plan demonstrating managed reduction.~~

Policy 13 ~~To use OVERSEER[®] version 6.2.0 5.4 and subsequent versions~~ consistent with the catchment load estimates to determine the nitrogen loss from land. Any future version changes will need to retain consistency between catchment and farm estimates; and may necessitate a variation to the RPS

Policy 14 To consider nitrogen budgets and alternative models for determining nitrogen loss if OVERSEER[®] cannot be readily used for a specific land use. Consideration of whether alternate nitrogen budgets may be used will take into account:

- ~~(α)~~ The ability to reliably estimate a property/farming enterprise's long-term nitrogen loss;
- ~~(β)~~ ~~The acceptability of information inputs, for example, verifiable leaching rates; and~~
- ~~(γ)~~ The potential availability of suitably qualified and experienced persons to develop the nitrogen budgets.

Any alternative to OVERSEER[®] for nitrogen budgeting purposes must be authorised by the Regional Council

Policy 15 To require information to be supplied for:

- (a.i.1.a) All farming activities on properties/farming enterprises between 5 hectares and 10 hectares in effective area that are not low intensity land use,
- (b) All permitted farming activities on properties/farming enterprises between 10 and 40 hectares; and
- (c) All permitted farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment not previously managed by Rules 11 to 11F that

are not low intensity land use.

This information will be used to monitor compliance with permitted activity conditions.

- Policy 16 To grant controlled activity consents for a duration of not less than twenty years ~~and non-complying activity consents, where granted, for durations less than 20 years.~~ The duration of longer consents will reflect the nature, scale and robustness of any ~~on-farm~~ mitigation options proposed to ~~achieve~~ offset any proposed increase in nutrient losses from the property/farming enterprise's 2032 Nitrogen Discharge Allowance Managed Reduction Target
- Policy 17 ~~To decline the re-consenting of activities that have failed to achieve the required reductions in nitrogen loss.~~

Page 8 Methods:

Provision : Delete

~~LR M1 Regional Council will supply information to Rotorua District Council for inclusion on Land Information Memorandum that:~~

- ~~(a) clearly identifies rural properties/farming enterprises that lie within the Lake Rotorua groundwater catchment boundary and are subject to these nitrogen management rules; and~~
- ~~(b) advises landowners of rural properties/farming enterprises identified in Method LR M1(a) to contact the Bay of Plenty Regional Council for further information.~~

Provision: LR M2 support with amendments

Reason: improved clarity and completeness

LR M2 Regional Council will review and publish the ~~science~~ scientific data that determined the objectives and limits set in the RPS and the Regional Water and Land Plan for Lake Rotorua on a five yearly basis from 2017. These reviews may include:

- (a) Review of trends in Lake water quality attributes including nitrogen, phosphorus, Chlorophyll a, algal blooms, clarity, trophic level index¹ for in-lake, inflows, and outflow where relevant; review of the health of indigenous fauna and flora and review of interactions and impacts of introduced fauna and flora
- (b) Review of progress towards achieving the RWLP TLI objective and ~~RPS Policy WL 6B(e) 2022 catchment nitrogen load target.~~

(c) Review Recalculation of the RPS Policy WL 3B(c) catchment nitrogen load, and a nominal phosphorus (external and internal) catchment load of 37 tP/yr², and any other nitrogen and phosphorus load combinations that catchment modelling shows would meet the Lake Rotorua Trophic Level Index of 4.2. This ~~may~~will necessitate:

- (i) a review and rerun of the lake model (or any successor model), including its ability to replicate recent years data;
- (ii) a review and rerun of ROTAN (or any successor model), including nitrogen and phosphorous loss rates, groundwater trends and attenuation rates, including OVERSEER[®] or similar estimates;
- (iii) an assessment of the efficacy and risks of alum dosing and an assessment of land-based or catchment-based phosphorus loss mitigation.

(d) Review of relevant New Zealand and international lake water quality re-mediation science.

(e) Recommendations to Council including for any necessary amendments to the RPS and the RWLP if the targets or loads materially alters

LR M3 Regional Council will respond to the recommendations that result from Method LR M2 science reviews through a formal and public decision making process. This may include initiation of a plan change and review of resource consent conditions.

LR M4 Regional Council will monitor permitted activities and any developing technologies to ensure that any related risks of ~~nitrogen~~ nutrient loss to the catchment are understood and acted on if necessary.

LR M5 Regional Council will:

- (a) ~~develop and maintain a Rule Implementation Plan;~~ support the establishment and resourcing of sub-catchment committees to develop sub-catchment Action Plans for the reduction of nutrient loads to the lake
- (b) report on the achievement of the ~~Rule Implementation Plan~~ sub-catchment Action Plans on a five-yearly basis through plan effectiveness reporting;
- (c) ~~develop and maintain a Nitrogen Discharge Allowance Register, that will monitor catchment-wide progress towards meeting the RPS Policy WL 3B(c) catchment nitrogen load;~~ and the “nominal” phosphorous load
- (d) provide land advisory services and incentives to support land use management change and land use change that reduces nitrogen and phosphorus loss in the catchment; and
- (e) encourage industry good practices to be implemented on rural properties/farming enterprises to reduce nitrogen and phosphorus loss in the catchment.

2 This nominal phosphorus load was first determined by Rutherford et al (1989) and confirmed in subsequent advice from the Water Quality Technical Advisory Group.

Provision: New Method

Add

Reason : to give effect to recommended alternative framework, consistent with TWLP Method 41

Relief Sought: add new method as follows or to similar effect

Method 41 Develop and implement Sub-Catchment Action Plans to maintain or improve lake water quality to meet the TLI set in Objective 11. Action Plans will be developed according to the following process.

Action Plan Stages

1 Stage 1 – Risk Assessment and Problem Evaluation

where the 3-year moving average TLI for the lake exceeds its designated TLI specified in Objective 11 by 0.2 for 2 consecutive years, initiate Stage 3.

2 Stage 2 – Project Prioritisation

Prioritisation will be determined in conjunction with the co-management partners of the Strategy for the Lakes of the Rotorua District.

3 Stage 3 – Development of Action Plan for Lake Catchment

(a) Where lake water quality exceeds the TLI:

- (i) Identify and quantify the lake water quality problem and any necessary research.
- (ii) Identify and quantify the reduction of nitrogen and phosphorus required in the catchment to achieve the TLI in Objective 11.
- (iii) Estimate the contributing sources of nitrogen and phosphorus in the catchment, and the effects of existing land uses and activities in the catchment on the lake's nutrient load.
- (iv) Estimate the lag between actual land use change and lake water quality effects.
- (v) Establish a timeline for developing an Action Plan for the lake catchment.

(c) Develop and implement Stage 3 and 4 of the Action Plan in conjunction with an Action Plan Working Group comprising appropriate parties from the individual catchment. The Action Plan Working Group will include, but is not limited to, Rotorua District Council, iwi, community groups, landowners, and relevant resource management agencies and industry representative groups. The main aims of Stage 3 of the Action Plan are:

- (i) Identify factors that affect lake water quality and any necessary research.
- (ii) Include equitable and workable provisions to address effects on existing land uses where it is necessary to restrict land use to maintain or improve water quality. Such provisions include, but are not limited to, criteria for possible financial assistance and land acquisition.
- (iii) Identify efficient, cost-effective and equitable measures and options to reduce inputs of nitrogen and phosphorus from the lake catchment to

maintain or improve lake water quality.

(iv) Determine if the TLI in Objective 11 can be realistically achieved, and a practicable timeline for achieving the target TLI.

(d) Identify the costs and benefits of different nutrient management and reduction methods. Such methods include, but are not limited to:

(i) Education on nutrient management;

(ii) Riparian retirement;

(iii) Constructed wetlands;

(iv) Sewage reticulation;

(v) Review of existing discharge consents in the catchment;

(vi) Land use changes;

(vii) Land purchase or lease;

(viii) Engineering works;

(ix) Nutrient trading systems.

(e) Take into account the macro-economic and micro-economic effects of lake water quality maintenance or improvement measures, including the value of land use and lake water quality to the catchment, district, region and wider community.

(f) Apply existing funding policies and other funding options for lake water quality maintenance or improvement works, including, but not limited to:

(i) Differential rating as a means of paying for works within the catchment.

(ii) Central government funding.

(iii) User charges.

(iv) Environmental Programmes.

(g) Determine if regulatory measures are necessary to control the discharge of nitrogen or phosphorus, or both, from land use activities in the lake catchment

(h) Document a timetable for implementing nutrient management and reduction options.

4 Stage 4 – Implementation and Monitoring of Action Plans

(a) Implement the lake water quality improvement measures identified and agreed to in Stage 3.

(b) Evaluate and report progress towards achieving the TLI in Objective 11 to all parties, and the community.

Page 9. Cross boundary issues:

Relief sought: Amend as follows

Reason: We request reasons as to why this method is not open for submission when it has significant impact on members.

The Operative Regional Policy Statement outlines the following approach to address cross boundary issues specific to Waikato Regional Council.

Provision: Rules LR-R1 – R12

Amend:

Reason: the alternate rules recommended give better effect to RPS and RWLP objectives and policies; and to our alternate integrated nutrient management framework

Relief Sought: delete Rules LR-R1 – R12, and replace with the following, and any consequential amendments.

Rule 1 - Permitted Activity

The use of land for farming activities/farming enterprises on properties which are less than 5 hectares in area are permitted provided the following condition is met:

- a) The farming activities/farming enterprises do not comprise of any of the following land use activities:
- Commercial cropping; or
 - Commercial horticulture; or
 - Dairy farming.

Rule 2 - Permitted Activity

The use of land for farming activities/farming enterprises on properties which are greater than 5 ha in area but less than 10 hectares in area are permitted provided the following conditions are met:

- a) The stocking rate on the property does not exceed the stocking rates specified in Schedule LR 2 at any point in time; and
- b) The farming activities/farming enterprises do not comprise of any of the following land use activities:
- Commercial cropping; or
 - Commercial horticulture; or
 - Dairy farming

Rule 3 – Permitted Activity

The use of land for farming activities/farming enterprises on properties which are greater than 10 hectares in area or do not meet the conditions of Rules 1 and 2 are permitted provided the following conditions are met:

- a) The use of land for farming activities/farming enterprises on properties which are less than 40 hectares in area:
 - The farming activities/farming enterprises will establish and will not exceed a nutrient benchmark in accordance with Schedule AA and provide that information to Council by 2017
- b) The use of land for farming activities/farming enterprises on properties which are greater than 40 hectares in area:
 - The farming activities/farming enterprises have a lawfully established nutrient benchmark for the property and will not exceed it; or will establish a nutrient benchmark in accordance with Schedule AA and provide that information to Council by 2017, and will not exceed it
 - Dairy and dry stock farming activities/farming enterprises, excluding dairy support, will meet a managed reduction target agreed in accordance with Table LR 4 by 2022

Rule 4 – Controlled Activity

The use of land for farming activities/farming enterprises on properties which do not meet Rule 3 is a controlled activity provided the following conditions are met:

- a) The increase in the export of nitrogen or phosphorous from the proposed farming activity/farming enterprise will be fully offset by the use of nutrient management measures on land within the same lake catchment; and
- b) The nutrient management measures used to fully offset the effects of the proposed land use do not occur on land which is covered by indigenous forest cover or is on land located within an urban area or lakeside settlement area

Matters of control

- a) Measures to offset adverse effects on water quality, including surface water and groundwater.
- b) Measures to avoid, remedy or mitigate adverse effects on aquatic ecosystems in streams and rivers.
- c) Aspects of the land use activity that cause an increase in the export of nitrogen or phosphorus from the activity.
- d) Measures to fully offset the increase in the export of nitrogen or phosphorus from the activity within the same lake catchment.
- e) Contractual arrangements with third parties where the offset measures are not applied on the property.
- f) Where the offset is not applied on the property, the change to the nutrient benchmark for both properties. The nutrient benchmark for the property where the land use activity

will take place will increase, and the property where offset measures will take place will decrease accordingly.

- g) Information and monitoring requirements.

Rule 5 – Restricted Discretionary Activity

The use of land for farming activities/farming enterprises on properties which do not meet Rule 4 is a Restricted Discretionary Activity

Matters of Discretion

- a) Measures to offset adverse effects on water quality, including surface water and groundwater.
- b) Measures to avoid, remedy or mitigate adverse effects on aquatic ecosystems in streams and rivers.
- c) Aspects of the land use activity that cause an increase in the export of nitrogen or phosphorus from the activity.
- d) Measures to fully offset the increase in the export of nitrogen or phosphorus from the activity within the same lake catchment.
- e) Contractual arrangements with third parties where the offset measures are not applied on the property.
- f) Where the offset is not applied on the property, the change to the nutrient benchmark limit for both properties. The nutrient benchmark for the property where the land use activity will take place will increase, and the property where offset measures will take place will decrease accordingly.
- g) Information and monitoring requirements.

Rule 6 – Permitted Activity

The use of land for farming activities/farming enterprises on properties which are greater than 10 hectares in area or which do not meet the conditions of Rules 1 and 2 are permitted from 2022 provided the following conditions are met:

- a) The TLI for Lake Rotorua is at or below 4.2; and
- b) The farming activities/farming enterprises have and do not exceed a lawfully established nutrient benchmark for the property in accordance with Rules 3; or in accordance with Rules 4 or 5.

Rule 7 – Controlled Activity

The use of land for farming activities/farming enterprises on properties which do not meet the conditions (b) or (c) of Rule 6 are permitted from 2022 provided the following conditions are met:

- a) The TLI for Lake Rotorua is at or below 4.2; and

- b) The increase in the export of nitrogen or phosphorous from the proposed farming activity/farming enterprise will be fully offset by the use of nutrient management measures on land within the same lake catchment; and
- c) The nutrient management measures used to fully offset the effects of the proposed land use do not occur on land which is covered by indigenous forest cover or is on land located within an urban area or lakeside settlement area, at the time of making the application.

Matters of control

- a) Measures to offset adverse effects on water quality, including surface water and groundwater.
- b) Measures to avoid, remedy or mitigate adverse effects on aquatic ecosystems in streams and rivers.
- c) Aspects of the land use activity that cause an increase in the export of nitrogen or phosphorus from the activity.
- d) Measures to fully offset the increase in the export of nitrogen or phosphorus from the activity within the same lake catchment.
- e) Contractual arrangements with third parties where the offset measures are not applied on the property.
- f) Where the offset is not applied on the property, the change to the nutrient benchmark limit for both properties. The nutrient benchmark for the property where the land use activity will take place will increase, and the property where offset measures will take place will decrease accordingly..
- g) Information and monitoring requirements.

Rule 8 – Restricted Discretionary Activity

The use of land for farming activities/farming enterprises on properties which do not meet Rule 7 is a Restricted Discretionary Activity from 1 January 2022 provided the following condition is met.

- a) The TLI for Lake Rotorua is at or below 4.2; and

Matters of Discretion

- a) Measures to offset adverse effects on water quality, including surface water and groundwater.
- b) Measures to avoid, remedy or mitigate adverse effects on aquatic ecosystems in streams and rivers.
- c) Aspects of the land use activity that cause an increase in the export of nitrogen or phosphorus from the activity.
- d) Measures to fully offset the increase in the export of nitrogen or phosphorus from the activity within the same lake catchment.
- e) Contractual arrangements with third parties where the offset measures are not applied on the property.

- f) Where the offset is not applied on the property, the change to the nutrient benchmark limit for both properties. The nutrient benchmark for the property where the land use activity will take place will increase, and the property where offset measures will take place will decrease accordingly.
 - g) Information and monitoring requirements.
- ❖ For the purpose of rules 6 – 8 the TLI for Lake Rotorua is measured on a 3 year rolling average.

Provision: LR R13

Support

Reason: for clarity

Relief Sought: retain

LR R13 Permitted – Incidental nutrient discharges

The discharge of nutrients onto or into land in circumstances that may result in a contaminant entering water that would otherwise contravene section 15(1)(b) of the Resource Management Act is a permitted activity, provided the land use associated with the discharge is authorised under Rules LR R1 to LR R8.

Provision: new schedule

Add:

Reason: to support administration of the rules

Relief Sought: add schedule as follows

Schedule AA - Nutrient Benchmark

Information required for Nutrient baseline

- 1) Land area;

- 2) Soils drainage class and soil characteristics;
- 3) Rainfall;
- 4) Slope/Topography;
- 5) Land cover and land uses on the property (including percentage of land area in different land uses);
- 6) Percentage of riparian area of rivers streams and lake shore on the property that have been fenced, or in retirement plantings

- 7) Area of wetlands on the property.

- 8) Number of houses on the property.
- 9) Type of sewage treatment for the houses on the property.
- 10) Fertiliser application – type and amount of fertiliser, and percentage of amount applied in May, June and July.
- 11) Type of livestock on the property.
- 12) Peak number of livestock by stock type.
- 13) For beef properties, the percentage of female livestock.
- 14) Number of livestock taken off the property, or put onto a wintering pad/loafing pad/feed pad during winter.
- 15) Where a wintering pad/loafing pad/feed pad is used, the waste treatment and disposal system for the wintering pad/loafing pad/feed pad.
- 16) Crop type(s), and area in each crop. This includes forestry.
- 17) Volume of irrigation.
- 18) Supplementary stock feed purchased or sold off-farm.
- 19) Description of other land management practices relevant to nutrient management.

Annual exports from the property (e.g. crops, livestock, milk solids etc.).

PC10 DEFINITIONS

Farming activities – includes all activities on any land located within the rural zone b

Property - Property means any contiguous area of land, including land separated by a road or river, held in single or multiple ownership (whether or not held in common ownership), that is utilised as a single operating unit, and may include one or more certificates of title.

Provision: Definitions

Amend:

Reason: for improved clarity and practical application

Relief Sought: amend definitions as below

Area: the property on which the farming activity/farming enterprise occurs and includes but is not limited to any land used for grazing, cultivation, cropping, horticulture, effluent disposal, plantation forestry or bush/scrub

Block: An area of land within a property/farming enterprise that has common physical and management attributes. OVERSEER® categorises blocks into types e.g. pastoral, fodder crop, trees and scrub, house. There may be multiple blocks of the same type within a property/farming enterprise reflecting the different physical or management characteristics of each of the blocks.

Bush/Scrub: Areas of native forest, bush, scrub, wetlands and exotic non-productive woody species (including gorse) ~~which are not grazed by stock.~~

Cropping: Includes a property/farming enterprise's effective area used for forage crops, fodder crops, maize and cultivation but does not include alternative pasture species.

Dairy: The effective area on which milking cows are grazed during the milking season and includes the animal effluent disposal area and fodder crop areas but excludes land used as dairy support, ~~plantation forestry and bush/scrub.~~

Dairy support: land used for heifer grazing or the wintering off of cows. *Note: dairy supports ~~nitrogen loss allowance is included within the dry stock allocation range.~~ managed reduction target range requires further work*

Dry stock: The effective area used for non-dairy activity, including grazing of sheep, beef cattle, goats, horses, deer, cropping and dairy support ~~but excluding plantation forestry and bush/scrub.~~

Effective area: ~~The part of the property/farming enterprise that is used for grazing, cultivation, cropping, horticulture and effluent disposal.~~

Farming Activity: dairy, dairy support and dry stock activities, cropping and horticulture, ~~but not~~ including plantation forestry or bush/scrub within the farm area

Grazed trees: Areas of trees, scrub or wetlands that under Rule 11 were also grazed by stock. These areas typically have low nitrogen discharges.

House block: ~~The area around a house including gardens, driveways and sheds where these areas are not grazed by stock.~~

Horticulture: Includes a property/farming enterprise's effective area used for nurseries, orchards, vineyards or growing vegetables for human consumption.

Lake Rotorua groundwater catchment: All land within the groundwater catchment boundary identified in Map 1.

Managed Reduction: ~~The planned progressive reduction of nitrogen nutrient losses from a property/farming enterprise over time to reach a Nutrient Discharge Allowance.~~ Managed Reduction Target

Managed Reduction Target: ~~The maximum amount of nitrogen loss that is allowed to occur from a property/farming enterprise at a target date (1 July 2022 and 1 July 2027).~~

Managed Reduction Offset: Nitrogen loss capacity that is transferred from a source property/farming enterprise for addition to the managed reduction pathway of a destination property/farming enterprise to enable land use change and meet a Managed Reduction Target.

Nitrogen: refers to elemental nitrogen as measured as Nitrogen Discharge Allowances (kg N/ha/yr) or as annual lake loads (tonnes N/yr). It is noted that the predominant form of leached nitrogen is the nitrate ion (NO_3^-). In dissolved, particulate or organic forms

Nitrogen budget: An estimate of the total nitrogen balance for a particular property/farming enterprise, taking into account all the nitrogen inputs and all the outputs.

Nitrogen Discharge Allowance: ~~The maximum annual amount of nitrogen loss that is allowed to occur from a property/farming enterprise post 1 July 2032. Nitrogen Discharge Allowances are allocated on a block basis and these are summed to provide a property/farming enterprise total.~~

Nitrogen loss entitlement: ~~A Nitrogen Discharge Allowance consent allowing for or~~ Managed Reduction Offset.

Nitrogen Nutrient Management Plan: A plan prepared for a property or farming enterprise that identifies sources of nutrients associated with the farming activity and that records mitigation actions to reduce nitrogen nutrient losses to meet Managed Reduction Targets and the Nitrogen Discharge Allowance, and to manage phosphorus loss. ~~The requirements of a Nitrogen Management Plan are specified in Schedule LR Six.~~

OVERSEER®: OVERSEER® Nutrient Budgets model (commonly referred to as OVERSEER®) is a software application that generates information about the flow of nutrients on and off a farm. ~~OVERSEER® calculations are based on a 01 July to 30 June period.~~

OVERSEER® File: An estimate of the total nitrogen nutrient balance for a particular property/farming enterprise using OVERSEER®, taking into account ~~nitrogen~~ inputs and outputs.

Plantation forestry: Areas of planting, maintenance and/or harvesting of tree species for commercial purposes ~~which are not grazed by stock.~~

Permanently retired: The permanent removal of plantation forestry and/or agricultural production to enable a natural reversion back to native forest cover (or a land use with the same nitrogen loss rate as bush/scrub) that is legally secured.

Phosphorous: refers to elemental phosphorus in dissolved, particulate and organic forms.

Property/farming enterprise: A single operating unit regardless of its ownership structure, size, arrangement and number of parcels and legal tenure, means an aggregation of parcels of land held in single or multiple ownership (whether or not held in common ownership) that constitutes a single operating unit for the purpose of a single farming unit.

For the purposes of these provisions, property/farming enterprise only relates to rural land within the Lake Rotorua groundwater catchment.

Reference files: ~~OVERSEER[®] files that provide a point of reference for the Lake Rotorua groundwater catchment and that represent the biophysical factors and farming systems found within the catchment.~~

Rural: In relation to land and properties/farming enterprises within the Lake Rotorua groundwater catchment means land identified on Map LR 1 excluding land outside BoPRC boundaries

Suitably qualified and experienced person: A person who:

- Implements OVERSEER[®] input best practice ~~and uses standard protocols recognised and approved by the Bay of Plenty Regional Council including those specific to the Lake Rotorua groundwater catchment; and~~
- has completed both the “Intermediate” and the “Advanced” courses in “Sustainable Nutrient Management in New Zealand Agriculture” conducted by Massey University and has at least five years’ work experience in a land use/farm advisory role; or
- ~~is approved in writing by the Chief Executive (or delegate thereof) of the Bay of Plenty Regional Council.~~

Provision: Schedule LR One

Oppose

Reason: too many uncertainties currently associated with both the loads and the targets

Relief Sought: delete schedule LR One, develop straightforward methodology for determining benchmarks for properties that don't currently have them

Provision: Schedule LR 3

Amend:

Reason:

Relief Sought: amend consequential to our recommended relief on the rules

Schedule LR Three – Information requirements for Permitted Rules ~~LR R5 and LR R6~~

- (a) Contact details of landowner (and any leaseholder).
- (b) ~~Legal description of the land~~ and farm identifier as provided by the Regional Council.
- (c) A map or aerial photograph showing the boundaries or land areas of the property and land use cover including pasture, horticulture, crops, fodder crops and non-grazed areas (including forestry, riparian and tree areas).

And where applicable:

- (d) Stocking rate (numbers, classes and ages) ~~including a breakdown by month.~~ as at 1st June, 1st December, 1st March
- (e) Type, quantity and timing of effluent and fertiliser applications.
- (f) Type area and planting dates for crops.
- (g) Type and quantity of supplementary feed.

This information is to be collated for the period 1 July to 30 June each year and be provided to the Regional Council annually, or at greater intervals as demanded by the Regional Council, no later than 31 October each year. The Regional Council reserves the right to seek

clarification from information provided.

Provision: **Schedule LR Five** – Use of OVERSEER® and Reference Files

Oppose

Reason: completely undermines the value of Overseer

Relief Sought: delete schedule LR Five

Table LR8 This table records Overseer 6.2 figures but they have already been superseded and bear no relevance to the PNDA provided to land owners now.

Provision: **Schedule LR Six** – Nitrogen Management Plan requirements

Oppose

Reason: this amounts to prescriptive input based management which is unacceptable for the reasons set out in the PC10 s32 report

a greater emphasis on managing outcomes rather than inputs. Additional information outlining the Council's proposed auditing regime, particularly where plans are prepared as part of an industry environmental management program.

Relief Sought: delete Schedule LR Six

Include reference to industry environmental plans and / or the use of annual Overseer nutrient Management reports that record and calculate a property nutrient loss to be averaged over a 5 year period.

Provision: Schedule LR Seven – Transfer of Nitrogen Discharge Allowance or Managed Reduction Offset

Support with amendments

Reason: It is important to provide flexibility mechanisms. In international experience, water quality trading markets are usually based on a wider range of participants to give market depth; and operate either as cap-and-trade markets and/or with baseline-and-credit participants.

Retain offsets to enable flexibility; more discussion needed on length of time.

Relief Sought: We request that Council give further consideration to including a wider range of non-farming participants; and to exploring other possible transfer/trading mechanisms.

Transfer of Nitrogen Discharge Allowance

The transfer of Nitrogen Discharge Allowance between properties/farming enterprises can enable a destination property/farming enterprise to permanently increase its Nitrogen Discharge Allowance.

- Any proposed increase in nitrogen loss (consequently triggering the need for a new Nitrogen Discharge Allowance) associated with land must be offset by a corresponding and equivalent permanent decrease in nitrogen loss (also triggering the need for a new Nitrogen Discharge Allowance) on one or more other properties/farming enterprises in the Lake Rotorua groundwater catchment.
- Any Nitrogen Discharge Allowance that is transferred between properties/farming enterprises must be authorised by the Regional Council to confirm the new source (transferor) Nitrogen Discharge Allowance and new destination (transferee) Nitrogen Discharge Allowance.
- Evidence will be required of the legal basis for how the Nitrogen Discharge Allowance transfer is secured.
- New Nitrogen Management Plans will be required to recognise the new Nitrogen Discharge Allowances and any new Managed Reduction Targets for the source and destination land.
- Transfer does not include the contractual permanent removal of Nitrogen Discharge Allowances from the system by the Lake Rotorua Incentives Board or other organisation, including where required as a condition of consent under the District Plan.

Transfer of Managed Reduction Offset

The transfer of Managed Reduction Offset between properties/farming enterprises can enable a destination property/farming enterprise to meet a Managed Reduction Target.

- Any increase in Managed Reduction Offsets associated with a property/farming enterprise must be offset by a corresponding and equivalent decrease in one or more other properties/farming enterprises in the Lake Rotorua groundwater catchment.
- Managed Reduction Offsets must be measurable and able to be delivered through mitigation actions within Nitrogen Management Plans.
- Evidence will be required of the legal basis for how the Managed Reduction Offsets are secured for the relevant time frame.
- New Nitrogen Management Plans will be required to recognise any Managed Reduction Offsets as part of the managed reduction for the source and destination land.
- Managed Reduction Offsets cannot be used to meet a Nitrogen Discharge Allowance target.
- The use of Managed Reduction Offsets by the destination property/farming enterprise is limited by the Managed Reduction Target time frames for the source property/farming enterprise. Managed Reduction Offsets ~~only last for a maximum of 5 years.~~

