# **Submission to BOP Regional Council regarding Proposed Rules for Lake Rotorua Catchment**

From D&A Trust, Central Road, Rotorua

don@hrml.co.nz

ph 0274 885 940

Thank you for the opportunity to present this submission regarding the proposed rules.

## Summary

This submission opposes the prosed rules for the reasons noted below.

- The proposed rules will prevent any further economic development in the Rotorua Catchment unless it is completely contained. Thus expansion of the urban area cannot happen due to increased untreated storm water loadings from impervious surfaces, increased nutrient leaching from gardens, lawns sports fields etc to cater for increased population. In the rural area, de-intensification will be required to meet the targets further reducing economic activity.
- 2. The proposed Rules place an unfair burden on a small group of landowners not on the wider community, especially as a result of loss of Capital Value of land
- 3. Council have failed to meet their requirements under s32 and s85 of the RMA. The s32 analysis provided is completely lacking any informed analysis of the impact on capital value and is flawed in its analysis of the benefits offered to forestry. It also appears to have a pre-determined outcome and thus fails the objectivity test.
- 4. A Science review is due to be completed in 2017 ie within the next 18 months. It seems ludicrous to implement a bunch of rules that could get turned on their head when the science review is completed. Early evidence is already indicating some very significant science outcomes that will require significant changes in how nutrients and land are managed, so why press ahead when all the indications are that changes will be required. Instead bring the Science Review forward to 2016.
- 5. PC 10 proposes to use Overseer for applications far beyond what it is designed for or capable of. This is fraught and dangerous and will not achieve improvements in the Lake.
- 6. Until very recently owners of small blocks were not part of the process and in fact prior to Rule 11, small block owners were actively advised by Council that this did not apply to them so they did not need benchmarks etc. Only recently have they become part of the process and are thus severely disadvantaged in knowledge and input. More telling, the resources required for Council to enforce the proposed rules on small blocks far exceeds any benefits. The threshold for small blocks should be lifted to 40 hectares as was advised at the time of benchmarking for Rule 11.

It is strongly suggested there are alternative methods by which the outcomes sought could be achieved in a more efficient and cost effective manner with the burden of cost being more evenly spread over all parties. In particular Council should consider purchase of land and conversion to forestry if that is the desired outcome. A rationale for this is presented below.

# **Outcomes Sought**

- 1. The rules as proposed in PC 10 do not progress in their current form.
- 2. The 2017 Science Review is brought forward to 2016 to inform decisions. This needs to be independent and peer reviewed, most likely needing the services of overseas scientists who have no conflicts of interest.
- 3. Council develop a plan to purchase land and change the land use at community cost not individual cost.
- 4. The threshold for small blocks be lifted to 40 hectares.
- 5. An independent, peer reviewed and objective s32 report be prepared that does not have pre-determined outcomes.

I wish to be heard in support of my submission.

#### Introduction

There has been a long history of land use change in the Rotorua Lake catchment which has resulted in increased sedimentation and nutrient loading within the lake. These inputs have come from both urban and rural development and continue being sourced from both these sectors and continue to do so.

Urban losses have been partly addressed by way of sewerage reticulation, but to date nothing has been done about storm water and vegetation management within the urban area.

Rural losses have also been partly addressed with land users seeking more efficient means to manage their operations and to meet reduced nutrient loss requirements (Rule 11).

Despite these changes, there is still a determination to further reduce nutrient loads into the Lake. The focus has been on nitrogen which is notoriously difficult to manage, but more recently there has been a recognition of the inter-relationship between N and P. Phosphate is now being managed through alum dosing, although this may not be a long term solution.

## TLI

A TLI has been set at 4.2 but there appears to be little scientific evidence to support this level. However as a result of alum dosing, this level has been reached. It is interesting to note however that at a Science presentation last year, the researcher noted that a TLI of 4.2 had never been reached since records were available – back in the 1920s. Given this, it is imperative that a sound scientific review of the 4.2 TLI is undertaken and a realistic nd achievable target is set.

We should not be endangering the entire economy of the basin on the basis of a TLI that is not scientifically valid.

#### Alum

Alum has been used to treat stream water for some time and has very good results – even achieving the TLI that is unlikely to be achieved any other way.

Alum is used internationally for drinking water and to date there have been no detectable issues with its use. While not a long term fix, when challenged what long term meant the scientists believe it can be safely used for 2 or 3 decades based on current knowledge.

This time frame allows the community to better understand the key drivers and potential mitigations that allow a clean lake without destruction of value within the basin. We should be making use of this window of opportunity to get a sound management system in place, not one that has many key unanswered questions.

## **Science Review**

A key platform of the process of cleaning up the lake is the science programme. A considerable amount has been learnt since it began, like most science, it throws up more questions than answers. In particular, recent work has shown the TLI has never been achieved without artificial intervention and the role of P is now being increasingly understood.

A review of the science to date is planned for 2017. Simple logic suggests that given the question marks over some of the work completed, bringing forward the review to 2016 and delaying the imposition of rules until the science is better understood is common sense.

It is highly likely that the Review will result in questions being asked about the validity of some of the proposed rules in PC 10.

Any review of the science needs to be independent and peer reviewed. It is likely that this will require input or even the entire review to be completed by overseas scientists who are not conflicted, either by within the BOP or as part of the NZ science community competing for limited funding in NZ.

It seems simple: Get the review done and then draft the rules, not the other way around.

#### **Attenuation**

For a long time, Council argued there was no attenuation of nitrogen moving from pasture to the Lake. That position has recently changed – a move that is supported. However there does not appear to be sound science supporting the level of attenuation allowed for. AS this is potentially a very significant component of the nitrogen (ie not at the margins), getting the level of attenuation correct is essential.

Until there is sound science to support the correct level of attenuation, the proposed rules are simply little more than a guess, and not even an educated one as the recent acceptance of attenuation shows.

## S32 Analysis

It is our contention that the s32 analysis as required by the RMA has not been completed to the standard required in order to determine whether rules or other measures are the best mans to achieve the targets set for the Lake.

In particular the cost to individual landowners, especially larger diary and drystock operations, has not been adequately modelled. The loss of capital value is derived from an estimate from a single valuer based upon almost no information. There simply have not been any sales on which to base the calculation of capital loss.

It is interesting to note that there have been several farms brought to market where offers have not come close to vendor expectations. This would indicate there is a significant mismatch between sellers and buyers expectations of value and the current market is a large discount to vendor expectations.

More telling is the very limited interest in any block within the catchment and the reluctance of Banks to consider supporting any purchase within the catchment.

Until a detailed and complete S32 analysis is complete it is impossible to claim that rules are the best solution.

It is our contention that other methods of achieving the targets better meet the requirements of the Act, are less disruptive and share the costs across the entire community.

The s32 report also notes that is reliant on a number of assumptions with no evidence to support where these assumptions have come from. An example is the comment on page 70 which states that 'Farming will remain viable". Where is the evidence to support this as it is not what the farming community are saying? There is also a time factor in here. Farming must remain viable into the future, not just in year one through selling assets such as Fonterra shares. Page 94 of this report claims that farmers per hectare income will increase as a result of selling assets! If this were true why does Council not do the same — sell assets and reduce our rates. The simple answer is that you can only sell the asset once, it is not a long term source of income. We would therefore argue that this is a misleading if not completely cynical statement to make.

The report also has a section relating to Land Purchase by Council as discussed elsewhere in this submission. It is our submission that this is a completely flawed analysis and appears to have a pre-determined outcome. For this reason alone, this needs to re-addressed and a complete and unbiased analysis completed that is peer reviewed outside Council so there can be confidence in it.

Another example of the failure of the s32 Report relates to the comment that all the additional forest that will be planted will improve opportunities for recreation and tourism activity. With the exception of Whaka (which is a legacy of central Government investment) and Skyline, private forest is generally not available to the public and there is no reason to suggest this will change. If this is the case, why could the same comment not apply to farmland? It would again appear that the outcome of the report was pre-determined and fails the objectivity test essential to such an important document.

Given the importance of this report and the likelihood of PC10 finishing up in the Environment Court, it is difficult to accept the somewhat cavalier attitude taken to such an important report.

It is our submission that the PC 10 process cannot proceed until at least a robust s32 Report is available.

#### **Land Purchase**

Land purchase, ie Council purchasing farms (especially dairy units) and replacing the current operation with trees is a certain means to achieve greater forest cover in the catchment which has been a stated aim of the programme.

By purchasing the land, removing the N 'units', planting trees and selling the subsequent forest provides certainty to all parties, fixes the costs, has known outcomes, shares the cost burden and reduce the ongoing costs of achieving the targets. It also provides a valid exit strategy for farmers who otherwise simply have to continue farming (as there is no market for their farms) until they go broke.

Council have repeatedly said they cannot purchase land as the cost is excessive. It is our contention this is not the case.

There are precedents for this occurring (for example the Transpower line from Whakamaru to Auckland where Transport purchased almost every property on the route).

The costs are know with certainty and do not have to all be met in the first year. This is a 20 year programme so by spreading the cost over that time, the cost is very affordable. Further, there is a major reduction in compliance and monitoring costs for Council – hence considerable savings in staff, and a simpler process for remaining farmers to get consents etc.

There is also a major reduction in the loss of capital value in the catchment, if the data provided is to be believed in terms of the advantage the forestry sector will accrue.

We would argue that this option needs to be seriously considered and costed by external parties as Council have a vested interest in growing the bureaucracy required to support the rules.

## **Monitoring and Compliance**

The rules as set out in PC 10 will require considerable growth in staff and support – substantially more than the s32 analysis suggests, all of which comes at a cost to ratepayers. Council's ability to ensure compliance using Overseer is severely questionable as s the ability to monitor what is occurring in the landscape.

Further, reliance upon neighbours dobbing each other in as the major form of monitoring as has been advised by staff is an appalling approach. There will never be support for the targets while the intention is to pit neighbours against each other.

Consent costs also become another significant burden on land users with no commensurate increase in productivity or output. It is our contention that this has not been fully understood in the way the rules as proposed have been drafted.

#### **Small Blocks**

Small block owners have been deliberately left out of this process form its beginning in the early 2000s until very recently. As a result they have been severely disadvantaged by the process and it has been extremely difficult for them to become engaged.

The threshold proposed by PC10 is for small blocks to be less than 5 hectares. This threshold should be lifted to 40 hectares to align with information provided by Council when they were introducing Rule 11.

Some would argue this would add additional burden on larger farms but this does not have to be the case. Council have the ability to 'take up' any additional N load that lifting the threshold to 40ha would create through its community initiatives and incentives.

The Incentives Board has already advised they will not look favourably on applications from small blocks for incentive payments as they do not get enough 'bang for their buck'. The same could be said for the small block owner. The value of the incentive is less than the cost of obtaining it so why bother. This leaves small block owners in a no win situation. No compensation available but plenty of cost.

However it can also be argued that small block owners pay proportionally more in rates than larger blocks and therefore are contributing to the Council's costs associated with cleaning the Lake.

Further, it is our contention that it is nigh on impossible to enforce compliance on small blocks as the systems available (such as Overseer) simply cannot get to the level of detail. Simply counting livestock does not provide evidence of nitrogen discharges as would be required for enforcement.

If compliance with a rule cannot be measured, it cannot be enforced and if it cannot be enforced, there is no point in having the rule. It is therefore essential that Council become more innovative in determining how the entire community can contribute to cleaning up the Lake at least possible cost to the Community.

All modelling completed by Council and their consultants with regard to small blocks has been based upon an incredibly small, and arguably statistically invalid sample size. It is completely inappropriate to make decisions of this magnitude based upon a sample of less than one percent and in some cases such as benchmarking on a single digit sample size.

#### Overseer

Unfortunately almost all of the decision making required by the proposed rules is driven by Overseer – something it is not designed for.

Overseer is a software tool that is capable of making complex calculations very quickly. It is not a form of artificial intelligence. Hence it cannot make 'allowances' for changed circumstances etc, it will simply tell you what it has been programmed to tell you.

Until the software is informed by a considerably larger dataset that is specific to every soil type, rainfall model and farming operation in the catchment, it can only give generalised outcomes based upon a small sample data set. Thus it cannot be used on an individual property basis.

We have already seen significant variation from different models of Overseer and this can be expected to continue. While the rules propose benchmarking to a given version of Overseer, the concept of the proposed rules being able to use Overseer to monitor an individual farm is way beyond the software's current capability.

In general Overseer can have a variation from the model to an individual farm of plus or minus 30%. This is far too much for a compliance tool and therefore should not be relied upon.

# Summary

This submission is not opposing the target of cleaning up the Lake. It is however opposed to the proposal in PC 10 as this is neither fair nor equitable, nor is it economically efficient and it is certainly not well supported by the available science.

We also need to be cognisant of the fact that it has taken 100 years to degrade the water quality in the Lake. Trying to fix it in 10 or 20 years imposes an almost impossible burden on the current generation when in reality it is an intergenerational issue.

There is a lot more that can be written on the subject, but there is also a living to earn!

Don Hammond

Trustee