Environment Bay of Plenty 5 Quay Street P O Box 364 Whakatane 3158

Dear Sir/Madam,

RE: SUBMISSION FOR LAKE ROTORUA NUTRIENT MANAGEMENT – PROPOSED PLAN CHANGE 10

I agree with the intent of the proposal to reduce the flow of nutrients into Lake Rotorua from the catchment area but disagree with the methods used within the Proposed Plan Change 10.

Rotorua catchment area is a unique area well used to the high flow of water passing from the surrounding catchment areas into the lake before overflowing to the sea via the river systems. Over many years the lake system has coped well with the fluxing of nutrients and water until the balance of nature was interrupted by settlements around the lake. This increased settlement has now come back to haunt the Council.

Farming in the catchment area together with deforestation has been driven and approved by Central Governments and Environment Bay of Plenty for many years without consideration for the condition of the lake. The deforestation and the change to more productive pastoral land has caused the loss of the natural ability for the land to naturally filter the water prior to entering the lake and river system.

Continued development of the lake edge with the removal of the natural filtering plants like raupo, flax etc for the improvement of views for residential housing again has reduced the ability of the land to naturally filter the catchment through riparian plantings.

With the increased settlement around the lake the birdlife has also increased to such an extent as to class the birds like swans, ducks and shags as pests. The bird excrete their own weight each and every day into the lake. This increases nutrients and sediment in the lake, increasing the growth of weed thus reducing the natural flow around the lake and clogging the river system.

Increased settlement around the lake edge has resulted in the majority of households having septic tanks with fluid and nutrient overflow to the aquafer. There is still a lack of Council funded sewer system connections reducing the requirement of septic tanks.

In storm or rain events the current sewer system is too small and as such unable to cope and with the overflow into the lake has causing pollution and adding nutrients to the already sodden system. Ngongotaha sewer system has numerous overflow events yearly.

Prior to laying the blame on pastoral farming within the catchment area, there are a number of remedial methods available to the Council to achieve reductions in the nutrient flow into the lake.

- Increased use of slag aggregate in roading surface preparation. A cheap byproduct of the steel manufacturing system can be used to remove nutrients in rain events. Lake Okaro trialled this with Waikato University using P socks at the inlet stream systems back in 2007 to great affect.
- Filters placed within the stormwater system again using slag and other filtering systems,

- Introduce the use of Rainstoppers on sewer manholes thus reducing the ingress of rain water into the sewer system and reducing sewer overflows and wastewater processing costs.
- Nitrogen fixing pellets as trialed in Lake Okareka.
- Fence and plant waterways with riparian plantings to naturally filter the water entering the system.
- Replant the lake edge with riparian plants to enable the natural filtering and nutrient fixing prior to entering the system.
- Increase the size and capability of the sewer system to cope with rain events without the requirement of overflow to the lake by installing storage systems to allow for peak periods.
- Stop the increase of residential settlement and development in marginal zones, like the publicly despised subdivision in Western Road, Ngongotaha. This development was drained and the water not filtered but passed directly into the Ngongotaha Stream without treatment.
- Increase the connections into the Council funded sewer reticulation higher up in the catchment area.
- Pond and filter rain event water utilizing overland flow paths to naturally filter the water.
- Reduce the number of birds on the lake by controlled culling.

Many of the above have a small cost for a large gain, others are larger in cost but can future proof the catchment area to achieve the proposed reduction in Plan Change 10.

On the whole BOPRC is taking the easy approach to just go straight for the farming rate payer. How about you look at the whole picture and clean the entire city up. Nick Smith, Minister for the Environment, is very much in favour of cleaning up water ways with sustainable means and many of these options are available at little costs. We are a nation of innovators so why doesn't BOPRC embrace some of the recent technology out there and turn Rotorua into an Eco City by all aspects taking responsibility for the pollution issues.

Yours faithfully

John Beuth

From: rules
To: "John Beuth"

Subject: RE: Bay of Plenty Regional Council submission letter - Proposed Plan Change 10

Date: Wednesday, 4 May 2016 4:04:00 p.m.

Attachments: image001.png image002.png

Good afternoon John. Thank you for your email.

This is to confirm that the Bay of Plenty Regional Council received your submission on Proposed Plan Change 10 on 28 April 2016. Your submission was received after the closing time of the submission period (4.00pm, 27 April 2016) however the Water Policy Manager, under delegated authority, has decided to accept your submission pursuant to section 37A(1) of the Resource Management Act.

Can you please confirm whether or not you wish to be heard in support of your submission.

Under Clause 7(1) of Schedule 1 of the Resource Management Act 1991, staff will prepare a summary of all submissions and publicly notify its availability. A copy of the public notice will be sent to you. Any person (including you) will then have the opportunity to make a further submission in support of, or in opposition to, any of the original submissions.

If any change is required to your contact details, please let me know.

Regards

Sue

From: John Beuth [mailto:john.beuth@hawkins.co.nz]

Sent: Thursday, 28 April 2016 4:08 p.m.

To: rules

Subject: Bay of Plenty Regional Council submission letter - Proposed Plan Change 10

Please find attached my submission to the proposed Plan Change 10.

Regards



John Beuth

Intermediate Quantity Surveyor

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