

IN THE MATTER: of the Resource Management Act 1991
(RMA)

AND

IN THE MATTER: Proposed Plan Change 2: Pukehāngi
Heights to the Rotorua District Plan under
Part 5, Sub-Part 5 – Streamlined Planning
Process and Schedule 1 Part 5 of the
RMA

**STATEMENT OF EVIDENCE OF JOANNE WATTS ON BEHALF OF BAY OF PLENTY
REGIONAL COUNCIL – NUTRIENT MANAGEMENT PLANNING PROVISIONS**

18 September 2020

Qualifications and Experience

1. My full name is Joanne Carol Watts. I am a Senior Planner in the Freshwater Policy team at the Bay of Plenty Regional Council (BOPRC) and am currently the Acting Freshwater Policy Team Leader. I have been employed by BOPRC for a little over 4 years.
2. Prior to this I was employed by the Rotorua District Council in various planning roles from 1994 through to 2016.
3. My current role involves progressing changes to implement the National Policy Statement for Freshwater Management 2020 (NPSFM 2020). I was involved in pre-hearing meetings and court assisted mediation for stage two appeal matters relevant to proposed Plan Change 10 - Lake Rotorua Nutrient Management (PPC10) to the Bay of Plenty Regional Natural Resources Plan (RNRP).
4. I hold a Bachelor of Planning degree (BPlan) from Auckland University and have worked in resource management and general planning for my whole career.
5. My professional memberships include:
 - Full member of the New Zealand Planning Institute
 - Member of the Resource Management Law Association
6. Although this is a Streamlined Plan Change hearing, I note that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court's Practice Note 2014. I have complied with that Code when preparing my written statement of evidence and I agree to comply with it when I give any oral presentation. I confirm that the issues addressed in this statement of evidence are within my area of expertise.

Scope of Evidence

7. The scope of my evidence addresses the following subjects:
 - (a) Planning provisions relevant to nutrient management within the Lake Rotorua groundwater catchment; and
 - (b) Nutrient management provisions in the Rotorua District Plan and Proposed Plan Change 2: Pukehāngi Heights (PP2).

8. My evidence recommends:
- (a) support for the majority of the s42A recommended changes which address nutrient management;
 - (b) consideration of further amendments to PPC2 provisions to further strengthen, clarify PPC2 and / or better align with PPC10; and
 - (c) a comprehensive nutrient management / land use assessment to more fully inform consideration of options to mitigate any likely nitrogen shortfall and also whether the Pukehāngi Southern Slopes area is appropriate for agricultural activity at a Rural 2 scale.

Background and Overview of Planning Framework relevant to Nutrient Management within the Lake Rotorua Groundwater Catchment

9. Lake Rotorua's nutrient issues have been well documented over a long period and the enhancement of the Lake's poor water quality has been of community and cultural concern for decades. There are two operative regional planning documents and PPC10 to the regional plan that capture the community's objectives for the Lake:
- (a) The Bay of Plenty Regional Policy Statement (RPS) (which contains the sustainable nitrogen load limit for Lake Rotorua of 435 tonnes per annum);
 - (b) The RNRP (which contains the trophic level index (TLI) of 4.2 for Lake Rotorua); and
 - (c) Proposed Plan Change 10 (Lake Rotorua Nutrient Management) to the RNRP (PPC10).

The RNRP was formerly known as the Regional Water and Land Plan hence the reference to that plan within PPC10.

10. While regional rules have applied to the Lake Rotorua catchment since 2008 these rules only capped nitrogen loss at a level we now know is unsustainable. PPC10 is designed to achieve an 'on farm' reduction of 140 tonnes of nitrogen a year by 2032 from the 'rural' part of the Lake Rotorua groundwater catchment within the Bay of Plenty region to meet the community's expectations for Lake Rotorua and help give effect to the provisions of the RPS. The 'rural' part is shown on Map LR 1 of PPC10 and reproduced in Appendix 1 of my evidence.

11. PPC10 forms a key part of the Integrated Framework and the programme that is seeking to deliver on the community aspirations for Lake Rotorua. Other parts of the Integrated Framework include reduction from engineering solutions, gorse removal, and through purchase of nitrogen by the incentives fund. The Integrated Framework assumes a nitrogen load from urban sewage of 30 tonnes.
12. With the exception of one matter, all PPC10 appeal matters have been resolved by the Environment Court's interim decision of 9 August 2019 and two consent orders issued 26 June 2018 and 2 June 2020. The only outstanding appeal matter relates to the appropriate quantum (and source) for an allocation of nitrogen to Treaty Settlement land which the Environment Court recently heard on 7 to 10 September 2020. The Court's decision is reserved.
13. It should also be noted that national policies on freshwater have recently come into effect. In particular, the new National Policy for Freshwater Management 2020 (NPSFM 2020) was gazetted on 5 August 2020. It requires amongst other things adoption of a much more integrated approach to freshwater management than previous versions. A new National Environmental Standard for Freshwater¹ (NESF) also came into force on 3 September 2020 (although parts of the NESF come into force on 1 May 2021 and 1 July 2021).
14. BOPRC is currently working through likely key shifts needed to our previous NPSFM implementation programme for the whole region within the tighter timeframe alongside strengthened requirements including significantly strengthened direction to actively involve tangata whenua, greater emphasis on Te Mana o te Wai, setting of visions and a wider ecosystem health focus. Changes to the RPS and RNRP to fully implement the NPSFM 2020 for the whole region are required to be notified no later than 31 December 2024².
15. Of note in the context of considering district plan changes, is the new requirement within NPSFM 2020 Integrated Management clause 3.5 (4):

"Every territorial authority must include objectives, policies, and methods in its district plan to promote positive effects, and avoid, remedy, or mitigate adverse effects of urban development on the health and well-being of water bodies, freshwater ecosystems and receiving environments."

¹ Resource Management (National Environmental Standards for Freshwater) Regulations 2020

² As required by s80A RMA.

16. While the freshwater planning process timeframes set by s80A RMA do not appear to apply to district plan changes, it maybe something the hearing commissioners wish to turn their mind to when considering options available to mitigate the likely shortfall in nitrogen from development enabled by PPC2 as mentioned in 6.58 of the s42A report.

BOPRC's Submission Points on Nutrient Management

17. BOPRC's submission points relevant to nutrient management, water quality and land use suitability are outlined in points 6 – 12 of BOPRC's original submission which includes a table of Nitrogen Discharge Allowances (NDA) for each of the 'Pukehāngi Height Area' properties in appendix 2 of the submission and of this evidence. The summary of submissions report summarises these points in 44.7 through 44.12.
18. The key aspect from a Lake Rotorua / nutrient management perspective is, plan change decision makers (and Rotorua Lakes Council) will need to satisfy themselves there is enough NDA from the existing parcels of land within the plan change area (or able to be sourced elsewhere from within the catchment) to support the opportunity to realise the density of subdivision and development enabled by PPC2 and existing District Plan provisions.
19. The submission points also seek amendments to the PPC2 provisions to address nutrient management, ensuring subdivision and associated land use are designed to achieve water quality and nutrient management objectives and policies in the District Plan, appropriately give effect to the RPS and are consistent with the RNRP and PPC10 ensuring no net increase in nitrogen load to the lake.

Section 42A Planning Report Response

20. The section 42A planning report for PPC2 evaluates BOPRC's submission points relevant to land use suitability, water quality and nutrient management in:
 - (a) Section 6. Evaluation of submissions on strategic issues;
 - (b) Section 7. Evaluation of submission on district plan objectives;
 - (c) Section 8. Evaluation of submission on provisions, zoning and structure plan.

21. The s42A report acknowledges nutrient management is a complex multi-agency issue that encompasses resource, asset and financial management considerations and makes reference to the '*Boffa Miskell Plan Change 2 - Nutrient Management: Background Report prepared for Rotorua Lakes Council*' (Background Report).
22. With the exception of a comprehensive nutrient management and land use suitability assessment undertaken by a suitably qualified person to inform the evaluation (discussed in further detail from paragraph 38 of my evidence), it is my opinion that the s42A report recognises BOPRC's concerns raised in summary of submission points 44.7 to 44.12 and appropriately evaluates these alongside other relevant submissions and further submissions.
23. For the most part they are addressed by the s42A recommended changes to PPC2 which are supported and include:
 - (a) Recommendations in 7.30 & 7.31 to add a new 'General Principle' within the Introduction A5.2A.1 and new Objective 5 within A5.2A.2. I note these could also be considered to address BOPRC 44.9 in part;
 - (b) The addition of new policies 5.1, 5.2 & 5.3 and new performance standards A5.2.3.4 for Residential 1 subdivision and A5.2.4.4 for Rural 2 subdivision;
 - (c) Paragraphs 8.108 and 8.144 recommended wording and equivalent changes to similar rules could also be considered to address BOPRC submission point 44.9 in part, removing the need to be consistent with the principles when making non notification decisions;
 - (d) Inclusion of suitable headings within the principles part of the introduction as outlined in recommendation 8.618;
 - (e) Replacing references to 'Large Lot Residential' with 'Rural Residential' recommended in 8.195.

Recommended Further Amendments to PPC2 Provisions

24. Set out below are further amendments to PPC2 provisions (as recommended in the s42A report) for consideration which in my opinion further strengthen, clarify the intent of PPC2 and / or better align with wording in the MOU and /or PPC10 with respect to nutrient management and land use suitability.

Subdivision Performance Standards

Amendment sought

25. Amend A5.2.3.4 Performance Standards – Subdivision 14.b. and A5.2.4.4 Performance Standards – Subdivision 10.b. as follows:

'Calculation of the nitrogen losses required to support the subdivision and for the number of proposed house lots from the proposed development of the land in accordance with any Council approved policy or guidelines, and undertaken by a suitably qualified and experienced person;

26. Amend A5.2.3.4 Performance Standards – Subdivision 14.c. and A5.2.4.4 Performance Standards – Subdivision 10.c. Performance Standards – Subdivision as follows:

'Where the nitrogen losses required to support the subdivision and for the number of proposed house lots from the development exceed the Nitrogen Discharge Allocation for the parent Rural property, proposals for nutrient loss reductions to address the nitrogen shortfall. This may include the application of a Council-operated offset regime.

Explanation

27. For better alignment and consistency with agreed amendments to the MOU (subject to checking final drafting), terms used in PPC10 and elsewhere in PPC2. The latest agreed amendments to the MOU uses 'the nitrogen required to support the subdivision and for the number of proposed house lots' and 'shortfall decisions'.

Land Use Performance Standards

Amendment sought

28. Add a new 'Nutrient Management' performance standard and appropriate numbering to both A5.2.3.3 Performance Standards – Land use (Residential 1) and A5.2.4.3 Performance Standards - Land Use (Rural 2), similar to subdivision performance standards and taking on board suggested amendments set out above, as follows:

##. Nutrient Management

A Nutrient Management Plan for the entire site shall be submitted that includes:

- a. Confirmation of the Nitrogen Discharge Allocation for the site;
- b. Calculation of the nitrogen losses required to support the development and any activities on the balance of the site in accordance with any Council approved policy or guidelines and undertaken by a suitably qualified and experienced person;
- c. Where the nitrogen losses required to support the development and any activities on the balance of the site exceed the Nitrogen Discharge Allocation for the site, proposals to address the nitrogen shortfall. This may include the application of a Council-operated offset regime.
- d. Nutrient management requirements to be met at full development and, where staged, at each stage of development.

Explanation

29. There are a number of land use activities listed in activity tables A5.2.3.1 a. Pukehāngi Heights Development Area - Residential 1 and A5.2.4.1 a. Pukehāngi Heights Development Area - Rural 2 which are 'caught' by more stringent Pukehāngi Heights Area specific provisions. However land use performance standards do not currently include a nutrient management performance standard (other than via A5.2.3.3. s42A recommended performance standard 12 and similar within A5.2.4.3).
30. In my opinion it is not sufficiently clear to plan users that nutrient management performance standards apply to land use activities, by applying the subdivision performance standards 'where relevant, to any proposed land use that occurs prior to subdivision'. This wording leaves applying nutrient management performance standards open to unnecessary debate, especially if there is no intention to subdivide.
31. It is also noted that the Restricted Discretionary Activity methods of assessment for land use in A5.2.6.1 refer to 'the extent of non-compliance with the performance standards' however the performance standards do not currently include a nutrient management standard.

Amendment sought

32. Amend s42A recommended A5.2.4.3 Performance Standard 9. as follows:

"9 Farming

~~*No agricultural activity shall be undertaken except within the Pukehāngi Southern Slopes.*~~

Explanation

33. It is unclear why the Pukehāngi Southern Slopes area has been excluded from the Rural 2 performance standard stating no agricultural activity shall be undertaken, other than for landscape assessment reasons and perhaps because it is not land in Hunt Family ownership. It is noted that there is support for a performance standard stating no farming or grazing in Rural 2 within the Hunt Family's further submission supporting BOPRC submission points 44.7 & 44.8.
34. A desktop analysis shows the Pukehāngi Southern Slopes area is identified in the New Zealand Land Use Capability Classification system as being LUC 6e 5+7e 2 and is steeply contoured which would indicate it may not be suitable for agricultural activity. It appears less suitable than the rest of the Rural 2 area within PPC2 to which the new performance standard applies. Advice from a suitably qualified and experienced land use advisor should be sought because NZ LUC information needs to be used alongside on site ground truthing due to scale limitations.
35. Careful subdivision layout, boundary placement and land management would be required to maintain land cover on the steep pumice slopes at the densities provided for by PPC2, which include a minimum average lot size of 4000m² for subdivision. Soil retention / prevention of erosion are key requirements to maintaining and enhancing lake water quality and positive outcomes for ecosystems. BOPRC notes that similar slopes were revegetated in other developments such as Parklands and Brunswick Park.

Definitions

Amendment sought

36. Adopt the following definitions for '*Suitably qualified and experienced person*', '*Nutrient Management Plan*', and '*Nitrogen Discharge Allocation*' within the District Plan definitions part of the plan or within Appendix 5.2A as follows:

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.

Nitrogen Discharge Allocation: The maximum annual amount of nitrogen loss that is allowed to occur from a property/farming enterprise post 1 July 2032. A property/farming enterprise’s Nitrogen Discharge Allocation equals the sum of the allowable nitrogen losses, for all of the blocks within the property/farming enterprise (drystock, dairy, bush/scrub, plantation forestry and house blocks). They are expressed as a percentage of the relevant reference files.

Nutrient Management Plan: A plan prepared for a property or farming enterprise that identifies sources of nutrients associated with land uses and that records mitigation actions to reduce nitrogen losses to meet Managed Reduction Targets and the Nitrogen Discharge Allocation and to manage phosphorus loss. The requirements of a Nutrient Management Plan are specified in Schedule LR Six of Plan Change 10 to the Regional Natural Resources Plan.

Explanation

37. ‘Suitably qualified and experienced person’, ‘Nutrient Management Plan’, and ‘Nitrogen Discharge Allocation’ are terms defined in PPC10. The definitions set out above are from PPC10 with minor modification to suit insertion into the district plan. Including these or similar definitions within the District Plan will aid consistent interpretation.

Comprehensive Nutrient Management and Land Use Suitability Assessment

Recommendation

38. Whilst ultimately any nitrogen shortfall decision (and associated risk) is RLC’s to make, I recommend:

A comprehensive assessment be provided from a suitably qualified and experienced person using the latest MOU formula (agreed by both RLC and BOPRC technical nutrient experts) and the 'most likely upper yield' outlined in paragraph 2.12 of the s42A report modified to factor in relevant changes such as:

- *any subdivision and development applications lodged or approved;*
- *rezoning and inclusion of approx. 9ha of land and yield enabled by medium density / retirement activities into proposed Plan Change 2;*
- *changes in likely developable area available resulting from likely extent of stormwater and recreational areas;*
- *any land suitability considerations such as the extent to which the assessment needs to include a nitrogen allocation for stock grazing;*
- *nitrogen required for land use/s on balance.*

39. The assessment would be in sufficient detail to establish the quantum of any expected nitrogen which would allow fuller consideration of options or combination of options available to mitigate shortfalls in nitrogen – ie the difference between the Nitrogen Discharge Allocation (NDA) for the parent properties within the plan change area and the nitrogen required to support the opportunity to realise the density of subdivision and development enabled by proposed Plan Change 2.

Explanation

40. The s42A report outlines the purpose of the proposed plan change and expected residential and rural residential yields in section 2. These include, the Ministers target yield of 790 residential units, the maximum yield of 1200 residential units and 100 rural residential lots - total of 1360 lots, as well as the 'most likely upper yield'. The most likely upper yield is as follows, and according to the s42A report, takes into account the location, slope and aspect of the development, and take up of medium density opportunities:

- Residential: 800 (11 lots /ha)
- Rural Residential: 100 lots
- Total 900 lots

41. The report also notes that a subdivision consent has been granted for part of the Sumner Block located near the Parklands development and that a resource consent application has been lodged with the Rotorua Lakes Council to establish a 'lifestyle village' on the Future Reserve 3 area consisting of 194 permanent units which is being processed. It is unclear whether these have been factored into the 'most likely upper yield' figures or otherwise.
42. The background report mentions that a review of the Memorandum of Understanding – Nitrogen Accounting Approach for Rotorua Waste Water Treatment Plant Discharge (WWTP MOU) is currently underway which seeks to address several issues listed in the report. Those most relevant to this context are:
 - Incorporating an attenuation factor into the nitrogen loss calculations in the MOU recognising that pastoral losses are attenuated and WWTP losses are not;
 - Outlining the process for addressing any shortfalls.
43. Contrary to paragraph 6.58 of the s42A report, advice that the MOU should be reviewed was raised by both Council's technical officers working together on Lake Rotorua nutrient management matters.
44. At the time of writing this evidence it is my understanding that content of amendments to the MOU addressing issues outlined in the background report have been agreed by technical officers from both the RLC and BOPRC (subject to final drafting). The latest version is with RLC for final review and signing. While BOPRC's submission does not mention the MOU, the recommended comprehensive nutrient assessment would include incorporating an attenuation factor into the nitrogen loss calculations.
45. Paragraph 6.58 of the s42A report states (in the context of discussion about the most likely upper yield) when taking into account attenuation factors in accounting for Wastewater Treatment Plant losses, it is likely that nitrogen losses from the proposed urbanisation at Pukehāngi Heights are likely to exceed the defined Nitrogen Discharge Allocations for the rural properties.
46. The report also helpfully outlines possible options for mitigating shortfalls in nitrogen *"through one or more of the following measures:*
 - *Reducing the yield of houses;*

- *Providing areas to be retired within the development or on any balance rural land (tree planting/plantation forestry);*
 - *Accepting a shortfall and the cumulative impact this will have on the Wastewater Treatment Plant mass discharge limit;*
 - *Offsetting the shortfall from a bank of nitrogen reserves.”*
47. The report concludes that the first three of these measures are not appropriate in the longer term, for the reasons set out within the s42A planning report, with Council advisors preference being to establish a Council managed reserve of nitrogen credits.

Evaluation

48. It is recognised that PPC2 is a location specific plan change responding to urban growth pressures which is being progressed ahead of the district wide plan change to address nitrogen from urban growth signalled in the MOU and likely further reinforced by new district plan requirements in the NPSFM 2020.
49. Given this, the best option maybe a combination of the first three options. I.e. modified proposed Plan Change 2 provisions to align more closely with the amount of on property nitrogen available to reduce the risk of a shortfall, until such time as RLC has progressing the district wide plan change and / or put in place the Council’s preferred nitrogen offsetting measures. It is expected to be possible with modification that the Ministers target yield could still be achieved.
50. Accepting the shortfall against the Wastewater Treatment Plant mass discharge limit is effectively the default position, if the first two options are discounted and the fourth option hasn’t been put in place yet. The s42A report states in 6.63 that the Wastewater Treatment Plant mass discharge limit only has ‘head room’ available for the next 5 – 10 years depending on growth areas. Taking into account the expected time to put in place the fourth option, in the short term the risk of a shortfall could be reduced by ‘tweaking’ the development enabled by the PPC2 provisions, while not compromising its purpose.

51. In my opinion, without knowing the quantum of any nitrogen shortfall enabled by PPC2 the hearing panel is not in a position to be able to fully consider the options or a combination of options available to mitigate shortfalls in nitrogen.

Minor Corrections

52. It is noted that references to 'Nutrient Management Plans and / or (NMP)' within the s42A planning report, should in most places be changed to refer to "Nitrogen Discharge Allocations and or (NDA)".
53. It is noted that the wording of PPC10 policy LR P19 and method LR M2 quoted within the Background Report is not the most up to date version and should be replaced with the following:

"LR P19 Account for the increased demand on infrastructure resulting from land use change, including from rural to urban use, through Method LR M5(g)."

"LR M5 Regional Council will:

[.....]

(g) implement an accounting methodology for the shift in nitrogen losses resulting from land use change, including from rural to urban use. The presence of an accounting methodology does not pre-determine any current or future consent process (including any consent conditions). The accounting methodology should recognise:

- 2001-04 is the baseline for accounting purposes;
- Land use change should not result in a net increase in nitrogen load to Lake Rotorua;
- Land use change (including subdivision) requires sufficient nitrogen allocation (NDA or offset);
- Offsets within the groundwater catchment;"

Conclusion

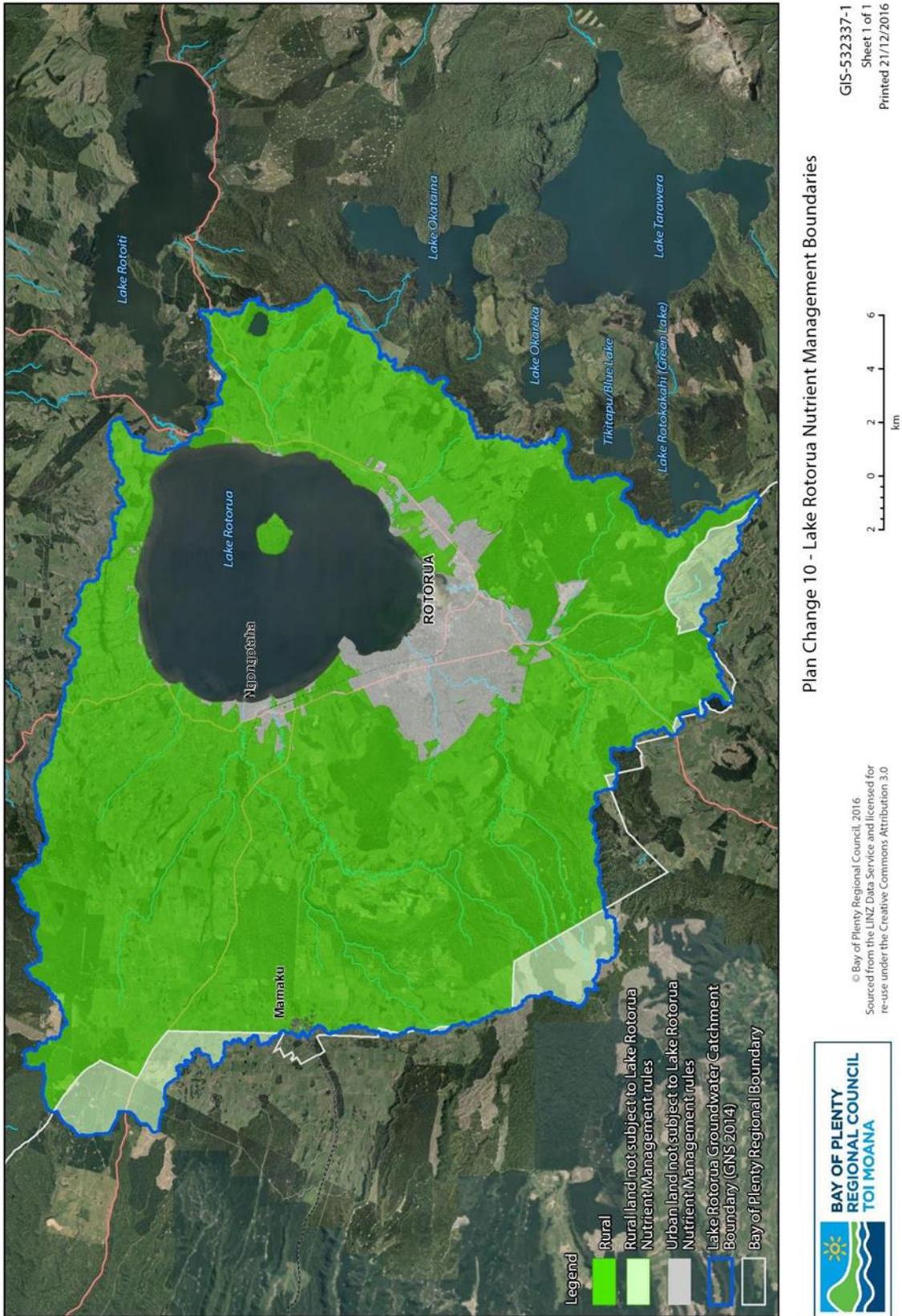
54. In my opinion:

- (a) Proposed Plan Change 2 provisions would be further strengthened, clarified and / or better aligned with relevant nutrient management requirements of the RPS & RNRP (including PPC10) by adopting the amendments to PPC2 as set out in paragraphs 24 through 37.
- (b) a comprehensive assessment of nutrient management and land use suitability should be undertaken by a suitably qualified person/s to inform decisions about options for mitigating the 'likely' shortfall in nitrogen and whether the Pukehāngi Southern Slopes is suitable for farming or otherwise as outlined at paragraphs 38 and 32 respectively.

DATE 18 September 2020

Joanne Watts

Appendix 1 – Copy of PPC10 - Map LR 1: Lake Rotorua Nutrient Management – Groundwater Catchment Boundary and Rural Land



Appendix 2: Nitrogen Discharge Allowances for properties within the Proposed Plan Change 2 area (as notified)

Owner	Legal description	Area (ha)	NDA (v6.3.2)
Sumner	Per section 1.3 of section 32 evaluation report 31 July 2019 Lot 2 DP 509501 Kaitao Rotohokahoka 1T Block (ML 9460) Part Kaitao Rotohokahoka 1S Block (part of) Lot 3 DP 509501 (part of)	84.4	1575 kg N/y
Hunt	Per section 1.3 of section 32 evaluation report 31 July 2019 Lots 1 - 7 DPS 81864 Lot 1 DPS 18145	56.3	1105 kg N/y
Te Arawa Group Holdings	Per section 1.3 of section 32 evaluation report 31 July 2019 Lot 1 DP 355447	19.5	368 kg N/y
		Total 160.2 ha	3048 kg N/y

Mention is made in the section 32 report about possible inclusion of the Future Reserve 3 zoned land by way of submission

Owner	Legal description	Area (ha)	NDA (v6.3.2)
Sumner (incl Future Reserve 3 and rural 1 cross hatch land)	Various	98.3	1748 kg N/y