Contents

RL Rotorua Lakes

The explanation/principal reasons for the provisions in this section have been moved to Appendix 1.

Rotorua Lakes

Objectives

RL O1 (Objective 11)

The water quality in the Rotorua lakes is maintained or improved to meet the following Trophic Level Indices:

(a)	Lake Okareka	–	3.0
(b)	Lake Okaro	–	5.0
(c)	Lake Okataina	–	2.6
(d)	Lake Rerewhakaaitu	–	3.6
(e)	Lake Rotoehu	–	3.9
(f)	Lake Rotoiti	–	3.5
(g)	Rotokakahi	–	3.1
(h)	Lake Rotoma	–	2.3
(i)	Lake Rotomahana	–	3.9
(j)	Lake Rotorua	–	4.2
(k)	Lake Tarawera	–	2.6
(l)	Tikitapu	–	2.7

RL O2 (Objective 12)

Reduced occurrence of cyanobacterial algal blooms on the Rotorua Lakes.

RL O3 (Objective 18)

Achieve the sustainable management of riparian margins (excluding artificial watercourses, and ephemeral flowpaths), which may include retirement, in the following priority catchments:

(a) Rotorua lakes.
  (i) All lake margins – 100% by 2007.
  (ii) Rivers and streams in all lake catchments – 100% by 2020.
  (iii) Rivers and streams in the catchment of Lake Rotorua – 90% by 2010.

Policies

RL P1 (Policy 33)

To promote and support land use change and/or land management practices in the catchments of the Rotorua Lakes that will achieve lake water quality improvement.

Methods of Implementation

The Regional Council will:

Working with Other Resource Management Agencies and the Community

RL M1 (Method 41) Develop and implement Action Plans to maintain or improve lake water quality to meet the TLI set in RL O1. Action Plans will be developed according to the following process.

Action Plan Stages

1 Stage 1 – Risk Assessment and Problem Evaluation

(a) Identify lakes that exceed the TLI set in RL O1, and initiate Stage 3. As at August 2003, the lakes that exceed the TLI are Lakes Okareka, Rotoehu, Okaro, Rotorua and Rotoiti. The timeline to initiate Stage 3 is:
  (i) Lake Okareka – early 2003.
  (ii) Lake Rotoehu, Lake Okaro – mid 2003
  (iii) Lakes Rotorua & Rotoiti – mid 2003

(b) For all other Rotorua Lakes not specified in (a):
  (i) Evaluate the risk of the lake exceeding the TLI set in RL O1, and initiate Stage 2. The timeline to initiate the risk assessment is: Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi, Rotomahana – 2005. The risk of the lake exceeding the TLI will be assessed using all lake water quality monitoring data, including, but not limited to, dissolved oxygen (Hypolimnetic Volumetric Oxygen Depletion Rate), water temperature, nitrogen and phosphorus levels, Chlorophyll a, algal species, Secchi disc depth, TLI, and Percent Annual Change. The evaluation will take into account the age of groundwater, spring water and inflowing stream water in the catchment, and the lag time between land use activities and effects on water quality.
  (ii) Where state of the environment monitoring identifies that a lake exceeds its TLI specified in RL O1, where the 3-year moving average TLI for the lake exceeds its designated TLI specified in RL O1 by 0.2 for 2 consecutive years, initiate Stage 3.

2 Stage 2 – Project Prioritisation

(a) Evaluate the results from Stage 1(b) (i) to determine if Stage 3 and 4 of the Action Plans are necessary to maintain or improve lake water quality.

(b) Prioritise the development of Stage 3 and 4 of the Action Plans for lakes where such action is necessary. 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 RL O1.
  (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.

(b) Disseminate information and research findings to the community.

(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 RL O1 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 (Refer to RL M2).

(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 RL O1 to all parties, and the community.

RL M2 (Method 42)

In conjunction with the Action Plan Working Group (refer to RL M1), review the necessity and application of the Rules in this section of this regional plan to individual lake catchments.

1 The review will:
  (a) Consider matters from the Action Plans developed in

accordance with RL M1.

(b) Consider how to achieve the long-term sustainable management of nitrogen and phosphorus use and discharges in the individual lake catchment.

(c) Recognise that it may be efficient, effective, and appropriate to develop and implement specific rule(s) for each of the lake catchments.

(d) Recognise that the Action Plan Working Group may recommend to the Regional Council any changes to the rules in this section but the Regional Council retains control over the plan change process. Members of the Action Plan Working Group and individuals retain the right of submission and appeal.

(e) Include any changes to the rules in this section of the Regional Plan through a plan change process in accordance with the requirements of Schedule 1 to the Act.

2 The review will be discussed during the development of the Action Plans, and plan change(s) initiated for:

(a) Lake Okareka – January 2005.
(b) Lake Rotoehu – January 2006.
(c) Lake Okaro – January 2006.
(d) Lake Rotorua and Rotoiti – January 2006.

RL M3 (Method 43) Support land use changes, and changes to land use rules, that:

(a) Achieve lake management objectives identified in lake Action Plans developed in accordance with RL M1.

(b) Integrate land use planning and rules in the Regional Council's resource management plans and Rotorua District Council's District Plan for lake catchments.

(c) Recognise that land use change and land management practices are an important part of lake management.

(d) Actively promote and support low nutrient loss land uses and land management practices in the catchments of the Rotorua Lakes.

Regulatory Methods

RL M4 (Method 52) Use the following process to include regulatory measures in this regional plan to control the export of nitrogen and phosphorus from land use activities in the catchment of lakes that:

1 Exceed their TLI specified in RL O1, where the 3-year moving average TLI for the lake exceeds its designated TLI specified in RL O1 by 0.2 for 2 years; OR

2 Are at risk of declining water quality, as identified by RL M1 Stage 1(b)(i).

Process for Regulatory Measures

(a) Investigate the cause or risk of the decline in water quality and report to the Regional Council.

(b) Develop an action plan for the lake catchment in accordance with RL M1.

(c) Initiate a plan change in accordance with the Act to include regulatory measures in this regional plan to address the export of nitrogen and phosphorus from land use activities, including land use changes, in the specific lake catchment.

Matters Relevant to Resource Consent Applications and Processing

RL M5 (Method 62) Investigate, and if practicable, implement a nutrient trading system within the lakes catchment for those land use changes affected by rules in this section.

RL M6 (Method 63) For the purposes of implementing the rules in this section, the Regional Council will use the following methods to assist the assessment of changes in nutrient export, and compliance with the requirements of the rules in this section:

(a) The development of a protocol that will assist the exchange of information between the Regional Council and Rotorua District Council for the purpose of assessing which land use of subdivision applications have the potential to increase nutrient export.
(b) Monitoring of catchments to provide information on land use and land use change.
(c) The investigation and evaluation of nutrient budget models at the property scale.
(d) Provision of advice to resource users on best nutrient management practices.

Monitoring and Investigation of the Environment

RL M7 (Method 69) Identify and monitor key sites in the catchments of lakes where Action Plans are developed to assess the extent of nitrogen and phosphorus reduction in the catchment.

RL M8 (Method 83) Review and refine lake water quality indicators in response to improved scientific knowledge.

Rules

Discharges of Nitrogen or Phosphorus from Land Use and Discharge Activities in the Rotorua Lakes Catchments

Explanation/Intent of this section

The rules in this section are necessary to achieve RL O1 and IM P1(a). This section should be read in conjunction with RL M1, RL M2, the Lake Water Quality Management Timetable in Appendix 1 and the Explanation/Principal Reasons for Integrated Management of Land and Water section of Appendix 1 for a full understanding of the provisions for lake water quality management in this regional plan. The intent of the rules in this section is to prevent the net increase of the export of nitrogen or phosphorus from the cumulative effects of all activities in the catchments of degraded lakes in order to assist the recovery of lake water quality. It is recognised that past practices have, over 60 years, contributed to the present state of the lakes, and as a result lake sediments contain high levels of nitrogen and phosphorus. It should be noted that the implementation of this section and RL M1 may take decades to return lake water quality to an acceptable state.

All land use activities in the catchments of the Rotorua Lakes contribute nutrients to the environment. To improve lake water quality it is necessary to adopt an integrated catchment management approach and address the effects of all activities in a catchment, including land use activities and point source discharges (e.g. sewage discharges, septic tanks, dairy shed effluent). It is therefore necessary to apply relevant nutrient management rules to all land use activities in the targeted catchments, which is illustrated in Table RL 1.

Table RL 1 Rules in Rotorua Lakes

	Land Use	Applicable Regional Council Rules
(a)	Reticulated urban areas and lakeside settlements	RL R1 – indicates that the effects of reticulated urban areas and lakeside settlements will be addressed through the control of point source discharges. RL R7 and DW R8 – apply to point source discharges of sewage and stormwater, which are managed by Rotorua District Council. RL R7 restricts any increase in nitrogen or phosphorus from a point source discharge. These two rules continue to relate to land use activities within the Lake Rotorua groundwater catchment. Sewage – Resource consents limit the allowable nitrogen and phosphorus discharge from sewage treatment plants. Rotorua City's nutrient loading from sewage has been reduced from 130-150 tonnes nitrogen per year and 33.8 tonnes phosphorus per year (prior to land-based discharge in 1988), to less than 30 tonnes nitrogen per year and less than 3 tonne phosphorus per year (2004). Reticulation of other urban areas and lakeside settlements will reduce the nutrient loading compared to the current outputs from septic tank systems by up to 80%. Refer to the Rotorua District Council Long Term Plan ('LTP') for reticulation dates for other areas in the Rotorua Lakes' catchments, which will be refined in future editions of the LTP or as a result of community decisions. Urban stormwater – resource consents will require the appropriate management and treatment of urban stormwater to ensure no net increase of nitrogen or phosphorus within the lake catchment from a discharge (refer to the Discharge of Stormwater in the Discharges to Water and Land section of this regional plan).
(b)	Non-reticulated urban areas and lakeside settlements	Septic tank discharges - Refer to the On-Site Effluent Treatment Regional Plan. The rules in that plan require the nutrient loading from septic tank discharges within 200 metres of the lakeshore, or on properties less than 4 hectares within lake catchments, to be substantially reduced from 40-70 grams nitrogen per cubic metre to 15 grams nitrogen per cubic metre. This requires the installation of an advanced treatment system. Some urban areas and lakeside settlements, and small rural properties will be reticulated over time and will then be covered by RL R1. Stormwater discharges – managed as per Reticulated Urban Areas (refer to (a) above).
(c)	Properties <0.4 hectares (4,000 m²) where the nitrogen output from the property is less than 10 kg per hectare per year	RL R2 – permitted providing the nutrient export levels remain below 10 kg per hectare per year (excluding the discharge from on-site effluent treatment systems). This rule does not relate to the Lake Rotorua groundwater catchment as shown Map LR 1. Recognises that low-intensity lifestyle blocks have minimal nutrient exports, while requiring landowners to retain the low intensity land use.
(d)	Other land uses	RL R3, RL R4, RL R5 and RL R6 – establishes a nutrient benchmark that landowners cannot breach. Sets a cap on the level of nutrients from rural land uses within each of the targeted lake catchments. These rules do not relate to the Lake Rotorua groundwater catchment as shown Map LR 1.

The Rules in this section are subject to a 'mandatory review clause' to clearly indicate that the Regional Council will review the applicability of the rules to each targeted lake catchment in accordance with RL M2 and the development of Action Plans under RL M1. It is recognised that the current set of rules are 'first generation', and that the Action Plan Working Groups may identify and develop more appropriate means of controlling nitrogen and phosphorus losses from land use activities. The wording of the 'mandatory review clause' ensures that the existing rules remain enforceable until the new reviewed rules for that lake catchment become operative. However, greater weight will be given to new rules as these progress through submission and appeal processes. The Regional Council is obligated to implement a review of the rules for each of the targeted lake catchments in accordance with the timeframes stated in RL M1. Specific rules for the groundwater catchment of Lake Rotorua are included in the LR Part of this chapter.

Advisory Note

1 Discharges of nitrogen and phosphorus from on-site effluent treatment systems (including septic tanks) are addressed by provisions in the OSET Plan. Where an on-site effluent treatment system requires a consent under the OSET Plan, the activity will be assessed in accordance with the OSET Plan and RL R7.

2 The Rules in this section apply to the activities listed in the table below:

Table RL 2 Rotorua Lakes Activities and Associated Rules

Activity	Catchments of Lakes Okareka, Rotoehu, Okaro, Rotorua and Rotoiti
Urban areas, lakeside settlements and small properties connected to reticulated wastewater systems	RL R1
Small properties (less than 0.4 hectares) not connected to reticulated wastewater systems, and nitrogen export level is less than 10 kg/ha/year (excluding land located within the Lake Rotorua groundwater catchment)	RL R2
Land use activities that have undergone conversion between 1 July 2001 and 30 June 2004, and subsequent modification (excluding land located within the Lake Rotorua groundwater catchment)	RL R3, RL R4, RL R5 and RL R6
Land use activities (not conversions) and subsequent modification (excluding land located within the Lake Rotorua groundwater catchment)	RL R4, RL R5 and RL R6
Existing point source discharges of contaminants	Refer to Rules in the Discharges to Water and Land section
Increases in the discharge of nitrogen or phosphorus from point source discharges	Activity is subject to rules in the Discharges to Water and Land section section and RL R7

3 For Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi, Rotomahana, RL M1 will be implemented to assess the risk of lake water deterioration, and to maintain water quality to meet the TLI set in RL O1. Refer to RL M4 for the process to include rule(s) in this regional plan to regulate activities in these lake catchments. Where lake water quality breaches the TLI, RL M1 (Action Plans) and RL M4 (new regulatory rules to control nitrogen and phosphorus) will be immediately implemented.

4 RL R3, RL R4, RL R5 and RL R6 control land use development, including the development of scrub or bare land, to ensure there is no net increase of the export of nitrogen and phosphorus from the proposal, or the increase can be offset on the property or within the same lake catchment. Low nutrient output land use activities are preferred.

5 Some land use activities in the catchments of the Rotorua Lakes may be subject to other rules in this regional plan, or rules in the Rotorua District Plan. For example, resource consents for vegetation clearance must be obtained in some areas. Land users are advised to check the relevant sections of this regional plan, or seek advice from the Regional Council staff. Contact Rotorua District Council for advice on provisions in the Rotorua District Plan.

Increases in Nitrogen and Phosphorus Exports from Non-Point Source Discharges in the Catchments of Lakes Rotoiti, Okareka, Rotoehu and Okaro

This section applies to land use activities, which comprise two components:

(a) Land use change – the change of land use from one usage to another where the nutrient export from the property is changed. For example, the

conversion of forestry to grazing, the conversion of dry stock to dairying, the conversion of pastoral grazing to horticulture, or the subdivision of land for lifestyle blocks or residential development.

(b) Land management practices – different practices within a land use type, including but not limited to, intensification of an existing land use, using a feed pad, fertiliser application rates and timing, riparian retirement, or stock management practices.

RL R2, RL R3, RL R4, RL R5 and RL R6 do not apply to land use activities in the specified lake catchments where reviewed rules for the lake catchment are operative. The mandatory review dates for the rules in the affected lake catchments (including the dates for public notification of reviewed rules) are specified in (a) to (d) below. RL R1 will remain in place as it is intended that lakeside properties, lake settlements, and other small rural properties (where appropriate), will be connected to reticulated sewage systems.

Table RL 3 Rule RL R2 – RL R6 Mandatory Review Clause

	Lake Catchments	**Mandatory Review Clause for Rules z RL R2 – RL R6**
(a)	Lake Okareka	A plan review must be initiated in January 2005 (refer to RL M2), and a plan change will be publicly notified by 1 July 2006.
(b)	Lake Okaro	A plan review must be initiated in January 2006 (refer to RL M2), and a plan change will be publicly notified by 31 December 2007.
(c)	Lake Rotoehu	A plan review must be initiated in January 2006 (refer to RL M2), and a plan change will be publicly notified by 31 December 2007.
(d)	Lake Rotoiti	A plan review must be initiated in January 2006 (refer to RL M2), and a plan change will be publicly notified by 31 December 2007.
(e)	Lake Rotorua	A plan change for the Lake Rotorua groundwater catchment was approved on 2 August 2017 and is included in the LR part of this chapter.

For administrative efficiency the rules in this section will be applied in accordance with (a), (b) and (c) where properties cross lake catchment boundaries:

(a) Where a property lies within two of the following lake catchments; Lakes Rotoiti, Rotoehu, Okareka and Okaro, information will be split to show the nutrient information for those parts of the property within each of the lake catchments.

(b) Where a property lies partly within the catchment of Lake Rotoiti, Rotoehu, Okareka or Okaro, and partly in another catchment, the rules apply only to that part of the property that is within the catchment of a specified lake, unless the area within the targeted lake catchment is less than 4,000 m² (0.4 hectares). In situations where the affected area is less than 4,000 m² (0.4 hectares), that area is exempt from the rules in this section. (Note, refer to (c) if the catchment that the property extends into is Lake Rotorua groundwater catchment (see Map LR 1)).

(c) Where a property lies partly within the catchment of Lake Rotoiti or Ōkāreka and partly within the catchment of Lake Rotorua the relevant LR rules will apply to the part of the property that is in the Lake Rotorua groundwater catchment, and the RL rules will apply to the part of the property in the Lake Rotoiti or Ōkāreka catchment.

The Regional Council has functions under the Act to undertake audits of resource use activities when necessary to assess compliance with rules and consents. This

includes, but is not limited to, activities permitted under RL R2, RL R3, and RL R4 and activities consented under RL R5, RL R6, RL R7.

The Regional Council will supply information to Rotorua District Council for inclusion on Land Information Memorandum for properties subject to rules in this section to clearly identify the following, where applicable:

(a) What lake catchment or catchments the property lies within.
(b) The part of the property that is exempt from the rules, if the part of the property within a targeted lake catchment is less than 4,000 m² (0.4 hectares).
(c) The rules in this section applicable to the property. Landowners are advised to contact the Regional Council for further information.

RL R1 (Rule 11) Permitted – Land Use Activities in the Catchments of Lakes Okareka, Rotoehu, Okaro, Rotorua and Rotoiti where the property is connected to a reticulated wastewater (sewage) system

Any land use activity in the catchments of Lakes Okareka, Rotoehu, Okaro, Rotorua or Rotoiti, where:

1 The property is connected to a reticulated wastewater (sewage) system; and either (a) or (b):
  (a) The property is within an urban area or lakeside settlement.
  (b) The property is in a rural area and is less than 0.4 hectares (4,000 m²).

Is a permitted activity.

Advisory Note

1 This rule applies to areas where there are existing reticulated wastewater (sewage) systems, and to other areas when such connections are made.
2 For the avoidance of doubt, this rule applies to infill housing, the development of residential subdivisions, and other land use changes (e.g. industrial or commercial operations) within reticulated areas.
3 Rural properties that are greater size than 0.4 hectares and connected to a reticulated sewage system are subject to RL R3, RL R4, RL R5 and RL R6.
4 Urban areas and lakeside settlements that are not reticulated are subject to RL R2, RL R3, RL R4, RL R5, and RL R6, whichever are relevant.

Explanation/Intent of Rule

To specifically provide for residential land use activities in the catchments of those Rotorua Lakes where water quality exceeds the TLI in RL O1, where the effect of the activity is addressed by the control of point source discharges (e.g. sewage and stormwater discharges). Refer to Flow Diagram RL 1 to assist reading of this rule.

RL R2 (Rule 11A) Permitted – Small-scale, low nutrient Land Use Activities in the Catchments of Lakes Okareka, Rotoehu, Okaro and Rotoiti

Any land use activity in the catchments of Lakes Okareka, Rotoehu, Ōkaro or Rotoiti, where:

1 The property is not connected to a reticulated wastewater (sewage) system, and
2 The size of the property is no greater than 0.4 hectares (4,000 square metres (m²)); and
3 The nitrogen export from the property is less than 10 kilograms per hectare per year, excluding the discharge from on-site effluent treatment systems on the property;

Is a permitted activity.

Advisory Note

1 Properties less than 0.4 hectares where the nitrogen export is greater than 10 kilograms per hectare per year are subject to RL R3, RL R4, RL R5 and RL R6. This applies to existing land use activities, and modification to existing land use activities that increase the nitrogen export level to greater than 10 kilograms per hectare per year.
2 RL R2 applies to non-reticulated lake-side settlements.
3 Land use activities that cause a nitrogen loss of less than 10 kilograms per hectare per year include, but are not limited to, any ONE of the following:

(a) Horse, donkey or mule – maximum of one per property.
(b) Sheep or goats – maximum of three per property.
(c) Alpaca or Llama – maximum of two per property.
(d) Pigs – a maximum of two weaners grown through to baconer stage; or one sow with a litter of piglets grown to weaned stage and one weaned subsequently grown to baconer stage. Pigs are to be kept in a sty with occasional free range, and no continuous free range.
(e) A maximum fertiliser application of 10 kilograms of phosphorus per hectare per year (or 4 kilograms of phosphorus per 4,000 m² per year). This equates to 300 kilograms of Potosí Super per hectare per year (or 120 kilograms per 4,000 m² per year).

Landowners can contact the Regional Council for free advice on other low nutrient land uses that will comply with the nutrient limit.

Explanation/Intent of Rule

To specifically provide for small-scale land use activities in the catchments of those Rotorua Lakes where water quality exceeds the Tropic Level Index in RL O1, where the activity has a low nitrogen export level. Refer to Flow Diagram RL 1 to assist reading of this rule.

RL R3 (Rule 11B) Permitted – Land Uses on Converted Properties, in the Catchments of Lakes Okareka, Rotoehu, Okaro and Rotoiti

Any land use activity in the catchments of Lakes Okareka, Rotoehu, Ōkaro or Rotoiti, where:

1 The land use activity is not otherwise permitted by RL R1 or RL R2;

and either 2 or 3:

2 The land use activity has been changed from dry stock to dairying, or pastoral grazing to horticulture; and the change commenced between 1 July 2001 and 30 June 2004.
3 The land use activity has been changed from forestry to dairying, forestry to pastoral grazing, or forestry to another land use; and the change commenced between 1 July 2001 and 30 June 2004.

Is a permitted activity subject to the following conditions:

(a) Where the land use activity complies with 2 above, the information in Table RL 4 (as applicable) shall be supplied to the Regional Council no later than 31 December 2005 or when the property is sold, whichever is the sooner, to register the annual average export of nitrogen and phosphorus from the property for the period 1 July 2004 to 30 June 2005. This will become the nutrient benchmark for the property.
(b) Where the land use activity complies with 3 above, the information in Table RL 4 (as applicable) shall be supplied to the Regional Council no later than 31 December 2005 or when the property is sold, whichever is the sooner, to register the annual average export of nitrogen and phosphorus from the

property for the period 1 July 2004 to 30 June 2005, except where the land use change began after 1 January 2003. This will become the nutrient benchmark for the property.

(c) Where the land use activity complies with 3 above and the land use change began after 1 January 2003, an appropriate nutrient benchmark will be set by the Regional Council in conjunction with the landowner and an independent nutrient management adviser, to allow a fair and reasonable production level relative to the property characteristics and land use.

(d) Any modification to the land use activity shall comply with (i), (ii) or (iii):

(i) The modification decreases the annual average export of nitrogen or phosphorus from the property as compared to the nutrient benchmark for the property.

(ii) The modification maintains the annual average export of nitrogen or phosphorus from the property at the same level to the nutrient benchmark for the property.

(iii) The modification is forestry harvesting where the area is replanted for forestry or permanent retirement purposes (note that forestry activities are also subject to by rules in the Land Management section of the regional plan).

Table RL 4 Rule RL R3 Nutrient Benchmark Information Requirements

	General Information
1	Land area.
2	Soil drainage class and soil characteristics.
3	Rainfall.
4	Slope/Topography.
5	Land cover and land use on the property (including percentage of land area in different land uses).
6	Percentage of riparian areas of rivers, streams and lakeshore 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/feedpad during winter.
15	Where a wintering pad/loafing pad/feedpad is used, the waste treatment and disposal system for the wintering pad/loafing pad/feedpad.
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.
20	Annual exports from the property (e.g. crops, livestock, milk solids etc).

Advisory Note

1 RL R3 applies to land used for commercial and industrial use, agricultural, pastoral and horticultural production, lifestyle blocks, production forestry, and bare land, scrub or indigenous forest, where the land use activity is not permitted by RL R1 or RL R2.

2 Land use changes, including intensification of existing land uses, are addressed by RL R3(d), RL R5 and RL R6.

3 Each property is to be managed separately. Where a landowner has multiple properties within the same lake catchment they may be managed jointly within a resource consent under RL R5. This would allow a landowner to increase production on one property and apply offset measures on their other property.

4 The process to obtain information to comply with RL R3 will be as follows:

(a) The Regional Council will send out an initial query to all landowners subject to RL R3 and RL R4 (which excludes land uses permitted by RL R1 and RL R2) to determine what land use activities are carried out on the property.

(b) Appropriate land use activity forms will be then sent to landowners to assist them to provide the relevant information. The Regional Council can provide information on soil drainage class and rainfall free of charge. It is the responsibility of the person using the land to provide the nutrient benchmark information. Where the property is leased, it is the responsibility of the lessee to provide the information rather than the landowner. The Regional Council will assist people to determine the baseline output of nitrogen or phosphorus from their property or properties.

(c) The Regional Council will track who has received land use activity forms and responses received. Landowners or land users (including lessees) who have not supplied information by the required date will be contacted, and if the information is not forthcoming, appropriate existing legislative options will be enacted.

5 In relation to Table RL 4, rows 11, 12, 13, 14 and 20, the type and size of stock will be used to determine the nutrient benchmark. Each stock type has a different nutrient output, for example, one sheep does not equate to one dairy cow.

6 In relation to RL R3(d), the measurement of the discharge of nitrogen and phosphorus is to be according to the following:

(a) Use the nitrogen and phosphorus export baseline using information supplied in relation to RL R3(a), (b) or (c).

(b) Determine the annual average export of nitrogen and phosphorus from the property as a result of the proposed land use activity. The same model used in (a) is to be used in (b) to compare the baseline level and the effects of any proposed change to the activity.

(c) Determine appropriate nutrient management measures that can be applied on the property to fully offset any increase of nitrogen or phosphorus from the proposed land use activity. The same model used in (a) and (b) is to be used in (c) to compare the baseline level, effects of the proposed land use activity, and any effects of proposed nutrient management measures to fully offset the expected increase of nitrogen or phosphorus.

(d) Where appropriate nutrient management measures cannot be applied on the property to fully offset the expected increase of nitrogen or phosphorus from proposed land use activity, the activity is subject to RL R5 or RL R6.

Explanation/Intent of Rule

To allow land use activities in the catchments of those Rotorua Lakes (excluding the Lake Rotorua groundwater catchment (see Map LR 1)) where water quality exceeds the TLI in RL O1, where the effect of the activity does not increase the discharge of nitrogen or phosphorus beyond an established baseline level. Refer to Flow Diagram RL 1 to assist reading of this rule.

RL R4 (Rule 11C) Permitted – Land Use Activities in the Catchments of Lakes Okareka, Rotoehu, Okaro or Rotoiti – properties where land use change (conversion) has not occurred

Any land use activity in the catchments of Lakes Okareka, Rotoehu, Ōkaro or Rotoiti, where the land use activity is not otherwise permitted by RL R1, RL R2 or RL R3; is a permitted activity subject to the following conditions:

(a) The information in Table RL 5 (as applicable) shall be supplied to the Regional Council no later than 31 December 2005, or when the property is sold, whichever is the sooner, to register the annual average export of nitrogen and phosphorus from the property for the period 1 July 2001 to 30 June 2004. This will become the nutrient benchmark for the property.

(b) Any modification to the land use activity must comply with (i), (ii), or (iii):
  (i) The modification decreases the annual average export of nitrogen or phosphorus from the property as compared to the level established as the baseline at 30 June 2004 as assessed by the nutrient model allowing for statistical variation.
  (ii) The modification maintains the annual average export of nitrogen or phosphorus from the property at the same level as established as the baseline at 30 June 2004 as assessed by the nutrient model allowing for statistical variation.
  (iii) The modification is forestry harvesting where the area is replanted for forestry or permanent retirement purposes (note that forestry activities are also subject to by rules in the Land Management section of the regional plan).

Table RL 5 RL R4 Nutrient Benchmark Information Requirements

	General Information
1	Land area.
2	Soil drainage class and soil characteristics.
3	Rainfall.
4	Slope/Topography.
5	Land cover and land use on the property (including percentage of land area in different land uses).
6	Percentage of riparian areas of rivers, streams and lakeshore 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 units taken off the property, or put onto a wintering pad/loafing pad/feedpad during winter.
15	Where a wintering pad/loafing pad/feedpad is used, the waste treatment and disposal system for the wintering pad/loafing pad/feedpad.
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.
20	Annual exports from the property (e.g. crops, livestock units, milk solids etc).

Advisory Note

1 RL R4 applies to land used for commercial and industrial use, agricultural, pastoral and horticultural production, lifestyle blocks, production forestry, and bare land, scrub or indigenous forest, where the land use activity is not permitted by RL R1 or RL R2.

2 Land use changes, including intensification of existing land uses, are addressed by RL R4(b), RL R5 and RL R6.

3 Each property is to be managed separately. Where a landowner has multiple properties within the same lake catchment they may be managed jointly within a resource consent under RL R5. This would allow a landowner to increase production on one property and apply offset measures on their other property.

4 The process to obtain information to comply with RL R4 will be as follows:

(a) The Regional Council will send out an initial query to all landowners subject to RL R3 and RL R4 (which excludes land uses permitted by RL R1 and RL R2) to determine what land use activities are carried out on the property.

(b) Appropriate land use activity forms will be then sent to landowners to assist them to provide the relevant information. The Regional Council can provide information on soil drainage class and rainfall free of charge. It is the responsibility of the person using the land to provide the nutrient benchmark information. Where the property is leased, it is the responsibility of the lessee to provide the information rather than the landowner. The Regional Council will assist people to determine the baseline output of nitrogen or phosphorus from their property or properties.

(c) The Regional Council will track who has received land use activity forms and responses received. Landowners or land users (including lessees) who have not supplied information by the required date will be contacted, and if the information is not forthcoming, appropriate existing legislative options will be enacted.

5 For the avoidance of doubt, RL R3 applies to properties where land use change (conversion) has occurred, and RL R4 applies to properties where the land use has remained the same since 1 July 2001.

6 In relation to Table RL 5, rows 11, 12, 13, 14 and 20, the type and size of stock will be used to determine the nutrient benchmark. Each stock type has a different nutrient output, for example, one sheep does not equate to one dairy cow.

7 In relation to RL R4, the measurement of the discharge of nitrogen or phosphorus is to be according to the following:

(a) Use the nitrogen and phosphorus export baseline using information supplied in relation to RL R4(a).

(b) Determine the annual average export of nitrogen and phosphorus from the property as a result of the proposed land use activity. The same model used in (a) is to be used in (b) to compare the baseline level and the effects of any proposed change to the activity.

(c) Determine appropriate nutrient management measures that can be applied on the property to fully offset any increase of nitrogen or phosphorus from the proposed land use activity. The same model used in (a) and (b) is to be used in (c) to compare the baseline level, effects of the proposed land use activity, and the effects of proposed nutrient management measures to fully offset any expected increase of nitrogen or phosphorus.

(d) Where appropriate nutrient management measures cannot be applied on the property to fully offset the expected increase of nitrogen or phosphorus from proposed land use activity, the activity is subject to RL R5 or RL R6.

8 A 10% statistical variation exists in the current nutrient models.

Explanation/Intent of Rule

To allow land use activities in the catchments of those Rotorua Lakes (excluding the Lake Rotorua groundwater catchment (see Map LR 1)) where water quality exceeds the TLI in RL O1, where the effect of the activity does not increase the discharge of nitrogen or phosphorus beyond an established nutrient benchmark level (+ or - 10%), or increases can be offset on the property. Refer to Flow Diagram RL 1 to assist reading of this rule.

RL R5 (Rule 11D) Controlled – Land Use Activities in the Catchments of Lakes Okareka, Rotoehu, Okaro and Rotoiti, where the increase in nitrogen or phosphorus exports is fully offset on land within the same lake catchment

The increase in the discharge of nitrogen or phosphorus from a land use activity in the catchments of Lakes Okareka, Rotoehu, Okaro and Rotoiti, where:

1 The activity is not permitted by RL R1, RL R2, RL R3 or RL R4; and
2 The increase in the export of nitrogen or phosphorus from the proposed land use activity will be fully offset by the use of nutrient management measures on land within the same lake catchment; and
3 The nutrient management offset measures are on a different property; and
4 The nutrient management measures used to fully offset the effects of the proposed land use activity are not on land with indigenous forest land cover, or an urban area or lakeside settlement; and
5 The nutrient benchmark of nitrogen or phosphorus for the property where the land use activity will occur, and the property where off-site nutrient management measures will be used, have been registered with the Regional Council in accordance with RL R3 or RL R4 (whichever is applicable);

Is a controlled activity.

The Regional Council reserves its control over the following matters:

(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) 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) Administration charges under section 36 of the Act.
(h) Financial contributions under Appendix 2 of this regional plan.
(i) Information and monitoring requirements.

Advisory Note

1 RL R5 applies to land use activities where the increase of nitrogen or phosphorus exports from the property will be fully offset by nutrient management measures are partly or entirely off the property but on land within the same lake catchment.
2 Where a landowner has multiple properties within the same lake catchment they may be managed jointly within a resource consent under RL R5. This would allow a landowner to increase production on one property and apply offset measures on their other property.

Explanation/Intent of Rule

To provide for land use activities where the effects of the activity can be offset and any increases in the export of nitrogen or phosphorus are fully offset within the same lake catchment, but not entirely on the property. Applicants will need to identify and apply measures to offset any increased nutrient export resulting from the proposed activity. The controlled activity status allows the Regional Council to assess the suitability of offset measures, and monitor the implementation of nutrient management practices, particularly where the implementation relies on a third party. Proposed activities where measures have not been identified to offset the increase in nitrogen or phosphorus, are restricted discretionary activities under RL R6. Refer to Flow Diagram RL 1 to assist reading of this rule.

RL R6 (Rule 11E) Restricted Discretionary – Land Use Activities in the Catchments of Lakes Okareka, Rotoehu, Okaro and Rotoiti

The discharge of nitrogen or phosphorus from a land use activity in the catchments of Lakes Okareka, Rotoehu, Okaro and Rotoiti, that is;

1 Not a permitted activity under RL R1, RL R2, RL R3 or RL R4; and
2 Not a controlled activity under RL R5;

Is a restricted discretionary activity.

The Regional Council restricts its discretion to the following matters:

(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) Measures to fully offset the increase in the discharge of nitrogen or phosphorus from the activity within the same lake catchment.
(d) Aspects of the land use activity that cause an increase the export of nitrogen or phosphorus from the activity.
(e) Contractual arrangements with third parties where the offset measures are not applied on the property.
(f) Administration charges under section 36 of the Act.
(g) Financial contributions under Appendix 2 of this regional plan.
(h) Information and monitoring requirements.

Advisory Note

1 Any activity subject to the rules in this section must also comply with other relevant rules in this regional plan, and any relevant rules in a district plan.
2 Resource consent applications under RL R6 may be granted where:
   (a) Any increase of nitrogen or phosphorus loss from the land use activity can be fully offset within the same lake catchment; or
   (b) Any increase of nitrogen or phosphorus is discharged outside the catchments of the Rotorua Lakes; or
   (c) Any increased nitrogen or phosphorus is fully bound within the soil and does not reach groundwater or enter surface water bodies; or
   (d) The purpose of the activity is for research purposes.
3 Resource consent applications under RL R6 will be declined where:
   (a) The adverse effects of the increased nitrogen or phosphorus loss from the land use activity cannot be fully offset within the same lake catchment; or the nitrogen or phosphorus cannot be taken outside the catchments of the Rotorua Lakes; or the nitrogen or phosphorus is not bound within the soil.

Assessment Criteria

When assessing resource consent applications under this rule, the Regional Council will have particular regard to, but not be limited to, the following provisions:
Objective *IM O1, LM O1, RL O1, IM O3*
Policy *IM P1*
Method *LM M9, RL M6*

Explanation/Intent of Rule

To allow the Regional Council to address the effects of discharges of nitrogen and phosphorus resulting from land use activities on lake water quality. This is to minimise the input of nitrogen and phosphorus into lakes and their catchments in order to achieve the Trophic Level Indices stated in RL O1. Applicants will need to identify and apply measures to offset any increased nutrient export resulting from the proposed activity. Resource consent applications for proposed activities that increase the nitrogen or phosphorus levels in a lake catchment, after taking into account offset measures including off-site mitigation, do not comply with the requirements of this regional plan and will be declined. Refer to Flow Diagram RL 1 to assist reading of this rule.

Increases in Nitrogen and Phosphorus from Point source Discharges in the Catchments of Lakes Rotorua, Rotoiti, Okareka, Rotoehu and Okaro

RL R7 (Rule 11F) Restricted Discretionary – Increased Discharges of Nitrogen and Phosphorus from Discharge Activities in the Catchments of Lakes Okareka, Rotoehu, Okaro, Rotorua and Rotoiti

The increase in the discharge of nitrogen or phosphorus from a:

1 Point source discharge of contaminants to water; or
2 Point source discharge of water to water; or
3 Point source discharge of contaminants to land in circumstances where the contaminant may enter surface water or groundwater;

in the catchments of Lakes Okareka, Rotoehu, Okaro, Rotorua and Rotoiti,

Is a restricted discretionary activity.

The Regional Council restricts its discretion to the following matters:

(a) Measures to offset adverse effects on water quality, including surface water and groundwater.
(b) Measures to fully offset the increase in the discharge of nitrogen or phosphorus from the activity within the same lake catchment.
(c) Measures to avoid, remedy or mitigate adverse effects on aquatic ecosystems in streams and rivers.
(d) Aspects of the activity that cause an increase the export of nitrogen or phosphorus from the activity.
(e) Administration charges under section 36 of the Act.
(f) Financial contributions under the Appendix 2 of this regional plan.
(g) Information and monitoring requirements.

Advisory Note

1 For point source discharges of contaminants, any increase in the discharge of nitrogen or phosphorus above authorised levels, is subject to RL R7.
2 Any activity subject to RL R7 must also comply with other relevant rules in this regional plan, and any relevant rules in a district plan.
3 Resource consent applications under RL R7 may be granted where:

(a) Any increase of nitrogen or phosphorus from the discharge activity can be fully offset within the same lake catchment; or (b) Any increase of nitrogen or phosphorus is discharged outside the catchments of the Rotorua Lakes; or
(c) Any increased nitrogen or phosphorus is fully bound within the soil and does not reach groundwater or enter surface water bodies; or
(d) The purpose of the activity is for research purposes.

4 Resource consent applications under RL R7 will be declined where:
(a) The adverse effects of the increased nitrogen or phosphorus from the discharge cannot be fully offset within the same lake catchment; or the nitrogen or phosphorus can not be taken outside the catchments of the Rotorua Lakes; or the nitrogen or phosphorus is not bound within the soil.

5 The increase will be determined relative to the lesser of:
(a) An existing limit in an existing resource consent, or
(b) The actual level of performance of the discharge activity.

Assessment Criteria

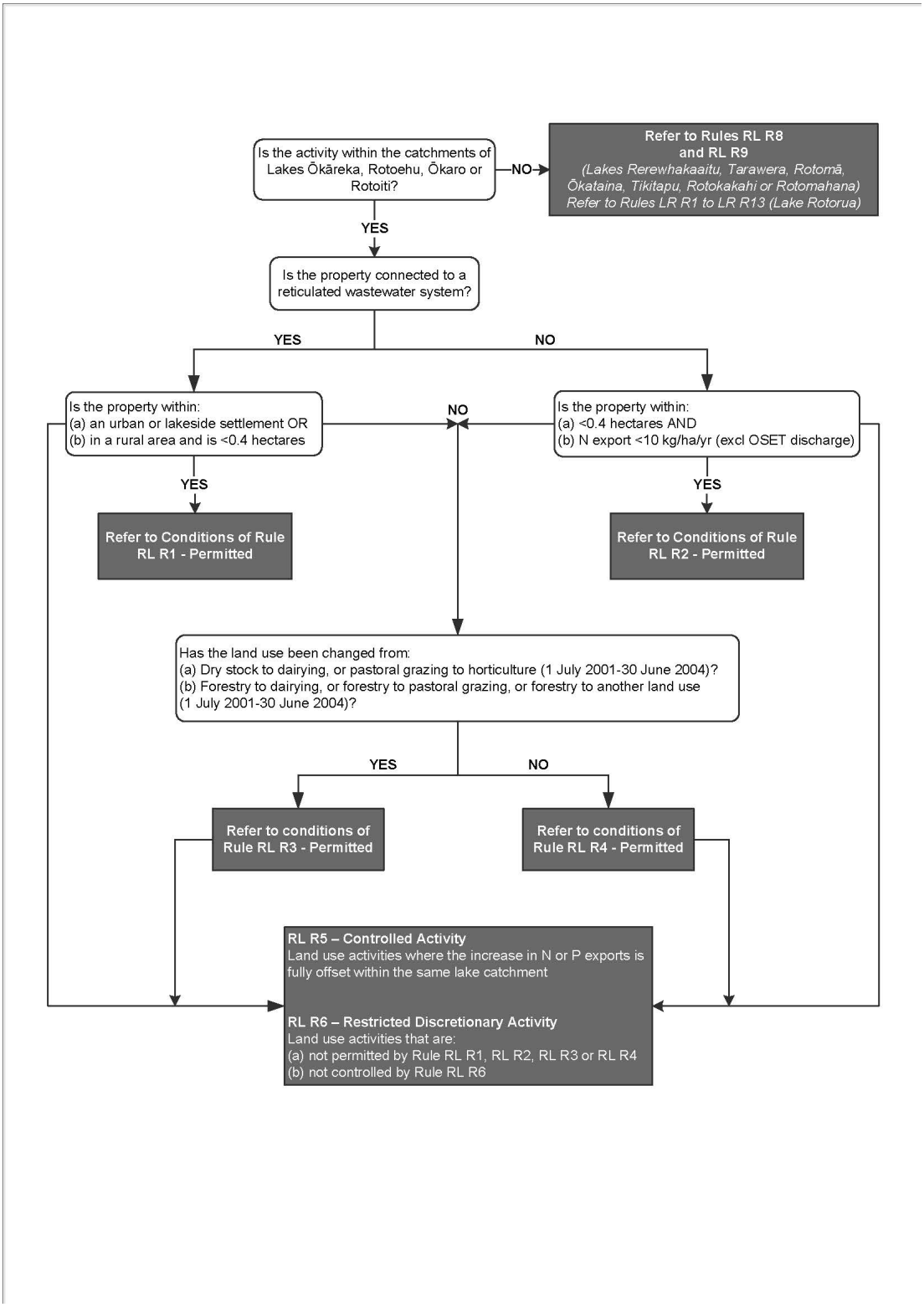
When assessing resource consent applications under this rule, the Regional Council will have particular regard to, but not be limited to, the following provisions:

Objective *IM O1, LM O1, RL O1, IM O3*
Policy *IM P1*
Method *LM M9, RL M6*

Explanation/Intent of Rule

To allow the Regional Council to address the effects of discharges of nitrogen and phosphorus resulting from point source discharges on lake quality. This is to minimise the input of nitrogen and phosphorus into lakes and their catchments in order to achieve the Trophic Level Indices stated in RL O1. Applicants will need to identify and apply measures to offset any increased nutrient export resulting from the proposed activity. Resource consent applications for proposed activities that increase the nitrogen or phosphorus levels in a lake catchment, after taking into account offset measures including off-site mitigation, that do not comply with the requirements of this regional plan will be declined. It is the intent of the Regional Council that the rules in this section (including RL R7) will be reviewed according to RL M2. Any changes to the rules will be through a publicly notified plan change process under the Act. Refer to Flow Diagram RL 1 to assist reading of this rule.

Flow Diagram RL 1 – Discharges and Land Use Activities in the Rotorua Lakes Catchments



Advisory Note

1 This flow diagram is to assist working out which rules apply but does not constitute a part of the rules. If there is any inconsistency between the flow diagram and the rules in the regional plan it refers to, the criteria in the rules prevail.

Increases in Nitrogen and Phosphorus Exports from Non-Point Source Discharges in the Catchments of Other Rotorua Lakes

RL R8 (Rule 12) Permitted – Changes in Land Use in the Catchments of Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi, and Rotomahana

Any existing land use or change to a land use activity in the catchments of Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi and Rotomahana, is a permitted activity, until a plan change is initiated to include specific rules for individual lake catchments that have been identified as at risk in RL M1, or where the 3-year moving average TLI for the lake exceeds its designated TLI specified in RL O1 by 0.2 for 2 years.

Explanation/Intent of Rule

RL R8 is to signal the intent of the regional plan to include regulatory mechanisms where necessary to maintain or improve lake water quality in Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi, and Rotomahana to meet the Trophic Level Indices set in RL O1. Such rules will be included in this regional plan in accordance with RL M2.

RL R9 (Rule 13) Restricted Discretionary – Changes in Land Use in the Catchments of Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi, and Rotomahana

Any change to a land use activity where the proposed activity causes an increase in the export of nitrogen or phosphorus from the property in the catchmen'ts of Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi and Rotomahana, where:

1 The lake is identified as at risk of water quality decline in RL M1, or
2 The 3-year moving average TLI for the lake exceeds its designated TLI specified in RL O1 by 0.2 for 2 years;

Is a restricted discretionary activity.

This rule is not operative until a plan change is initiated to include specific rules for individual lake catchments that have been identified as at risk in RL M1, or have declining water quality as measured by lake water quality monitoring.

Explanation/Intent of Rule

RL R9 is to signal the intent of the regional plan to include regulatory mechanisms where necessary to maintain or improve lake water quality in Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi, and Rotomahana to meet the Trophic Level Indices set in RL O1. Such rules will be included in this regional plan in accordance with RL M2.

LR Lake Rotorua Nutrient Management

These Lake Rotorua Nutrient Management provisions apply to the land containing rural production (pastoral activities) and forestry within the Lake Rotorua groundwater catchment, as shown in Map LR 1. It does not include land located within the Waikato region.

Scope is restricted to the management of land use activities within the rural area identified in the Lake Rotorua groundwater catchment as shown in Map LR 1, which contribute nitrogen to Lake Rotorua. These provisions are one of the methods being used to give effect to Policies WL 3B, WL 5B and WL 6B of the Regional Policy Statement and provides for a staged implementation of these requirements.

The need to achieve the sustainable lake load of 435 tonnes of nitrogen per annum is based on what the best science available suggests is necessary to achieve the trophic level index (TLI) objective for Lake Rotorua of 4.2. Adaptive management is a core element of the implementation of nutrient management for the Lake Rotorua groundwater catchment.

This includes regular reviews of the science and policy and responding to the outcomes of these reviews. Reviews will need to consider new potential pathways towards improved lake, community (including social and economic impacts) and cultural outcomes that may come from opportunities presented by new technology and innovative land uses, and from changing product and land use demands. Regional Council may also need to consider further changes to the Plan to address science review recommendations if required and other NPSFM attributes of relevance.

The Regional Council has adopted a package of methods to give effect to Policies WL 3B, WL 5B and WL 6B of the Regional Policy Statement which will see the nitrogen load to Lake Rotorua being reduced through an integrated programme of regulated land use nitrogen reductions (Nitrogen Discharge Allocation), engineering solutions, incentives, and gorse conversion. This package of interventions forms the Integrated Framework. The Integrated Framework was developed through the Lake Rotorua Stakeholder Advisory Group process and adopted by the Regional Council on 17 September 2013 as being the preferred approach to managing nitrogen losses from rural land use activities in the Lake Rotorua groundwater catchment as well as engineering solutions that include the urban part of the catchment. It provides the basis for the proportional nitrogen reductions that apply to rural land use activities being implemented through these rules and for the allocation methodology.

The Integrated Framework contains the following proportional reductions for the dairy and drystock pastoral farming sectors (Table LR 1) which are used in the allocation methodology:

Table LR 1 Pastoral farming sector proportional reductions

Sector	ROTAN 2011 Area (ha)	ROTAN 2011 Load (tN/yr)	2032 Sector allocation (tN/yr)	Reduction (tN/yr)	Proportional reductions from sector as % of sector load
Dairy	5050	273.2	176.8	96.4	35.3%
Drystock	16125	253.2	209.6	43.6	17.2%

Advisory Note

1 The values used in Table LR 1 are based on Overseer 5.4 numbers and reflect the best science estimates of nitrogen entering the lake. The dairy and drystock areas are effective grazing areas (including fodder crops).

The pastoral farming sector proportional reductions are carried through into the methodology used to allocate Nitrogen Discharge Allocations and Managed Reduction Targets to individual properties/farming enterprises.

Allocation of nitrogen losses is based on nutrient benchmark information applied to the 2014 GNS groundwater boundary area and expressed as Overseer 6.2.0 values. Table LR 2 contains the basis for the modelled 2015 sector contributions to achieve the sustainable lake load.

Table LR 2 Sector contributions

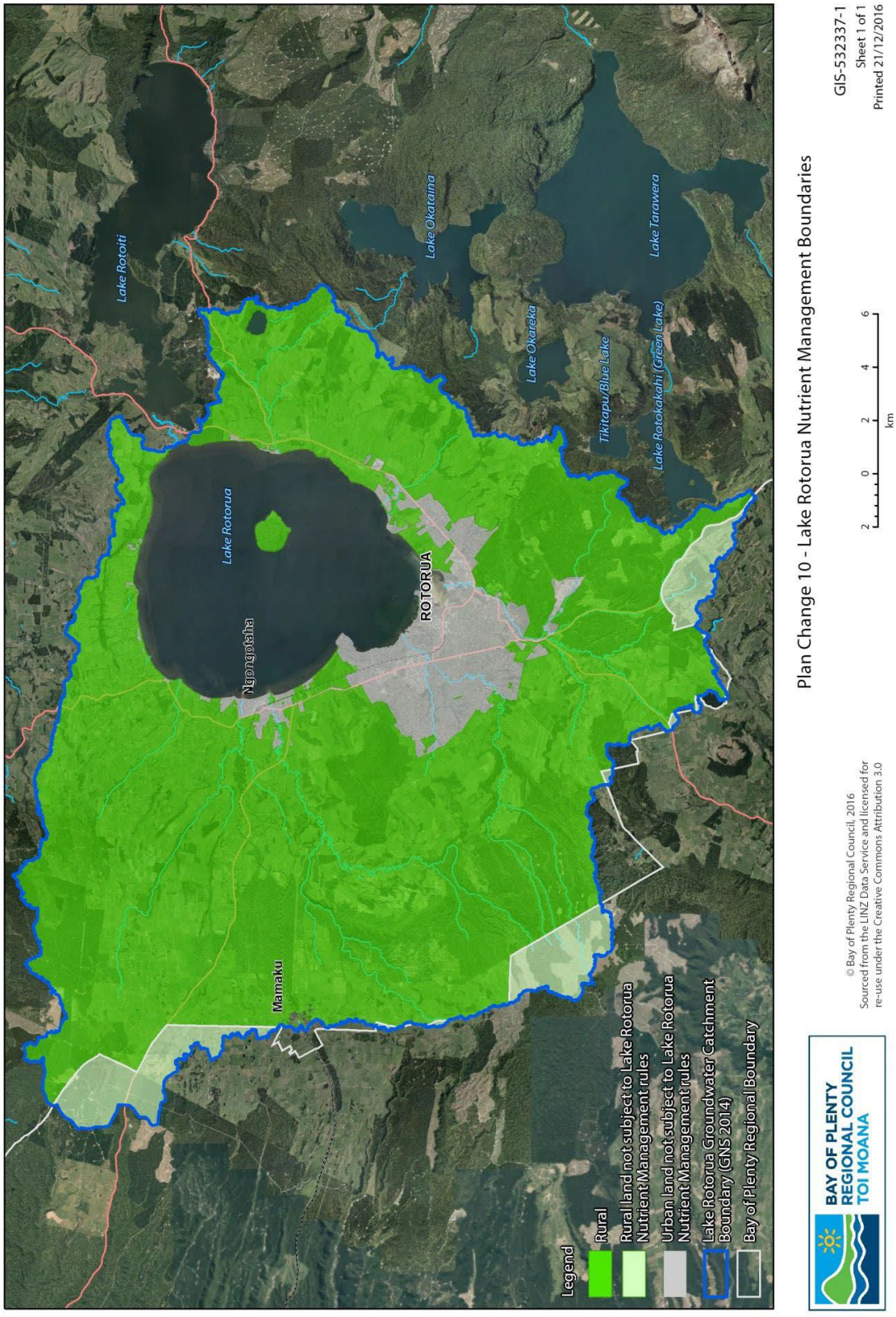
Sector	Sector area (ha)	Sector proportional reduction (Integrated Framework)	Sustainable lake load by sector (tN/yr)	Average nitrogen loss rate to achieve sustainable lake load (kgN/ha/yr)	Standard nitrogen loss rates (kgN/ha/yr)
Dairy	5016	35.3%	324	64.5	
Drystock	16266	17.2%	416	25.6	
Forestry*	19215				
Plantation forestry	8946	0%	22.5		2.5
Bush/scrub	10269	0%	30.9		3

Advisory Note

1 Values in Table LR 2 are Overseer 6.2.0 numbers.

2 ***Forestry** equals the plantation forestry and bush/scrub sector areas combined

Map LR 1 – Lake Rotorua Nutrient Management – Groundwater Catchment Boundary and Rural Land



Objectives

Regional Policy Statement Objective 28: Enhance the water quality in the lakes of the Rotorua District and other catchments at risk and Regional Natural Resources Plan and RL O1 (Objective 11) establish the freshwater objectives for Lake Rotorua.

Policies

Policies LR P1 to LR P19 apply to the management of nutrient loss in the Lake Rotorua groundwater catchment.

LR P1 Reduce nitrogen losses from farming activity to Lake Rotorua to assist to achieve the 2032 435 tonne sustainable annual nitrogen load for Lake Rotorua as required by Policy WL 3B(c) of the Regional Policy Statement while providing for an adaptive management approach.

LR P2 Manage diffuse and point sources of phosphorus loss through:

(a) regional plan discharge rules;

(b) non-regulatory programmes;

(c) the implementation of good management practices particularly within critical source areas, as part of an approved Nutrient Management Plan prepared for individual properties/farming enterprises.

Adaptive management

LR P3 Recognise the balance between certainty, the use of best science and good environmental data and the need for modelling in the management of nitrogen within the Lake Rotorua groundwater catchment by using:

(a) the 435 tonne sustainable annual nitrogen load for Lake Rotorua from 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) the most current version of Overseer, except for initial allocation purposes where Overseer 6.2.0 is used; and

(d) the pastoral sector reductions set out in Table LR 1.

LR P4 Implement adaptive management in the management of nutrients within the Lake Rotorua groundwater catchment through:

(a) science reviews set out in LR M2, including review of the total catchment nutrient loads and subsequent consideration by Regional Council of recommendations;

(b) review of progress on achievement of Integrated Framework actions towards meeting the 435 tonne sustainable annual nitrogen load for Lake Rotorua by 2032;

(c) regular reviews of the Regional Policy Statement and Regional Natural Resources Plan policies, rules and methods under the Resource Management Act 1991;

(d) five-year individual on-farm Nutrient Management Plan review timeframes; and

(e) the use of Overseer reference files and proportional requirements to reduce the variability for individual property nitrogen loss limits, and monitoring the performance of that methodology.

Nitrogen allocation

LR P5 Assist to achieve the 435 tonne sustainable annual nitrogen load for Lake Rotorua by allocating nitrogen discharge allocations that align with the ranges for dairy and drystock activities within the Lake Rotorua groundwater catchment (Table LR 3) and to recognise standardised Overseer loss rates for plantation forestry, bush/scrub and house blocks.

Table LR 3 Allocated nitrogen loss rates to sectors

Sector	Average nitrogen loss by sector (kgN/ha/yr) (Overseer 6.2.0)	Nitrogen loss range within each sector (kgN/ha/yr) (Overseer 6.2.0)
Dairy	64.5	54.6 – 72.8
Drystock	25.6	18 – 54.6

LR P6 Determine individual Nitrogen Discharge Allocations for the purpose of achieving by 2032 the 435 tonne sustainable annual nitrogen load for Lake Rotorua in accordance with Schedule LR One for all properties/farming enterprises that are not provided for as permitted activities.

LR P7 Manage the transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets between properties/farming enterprises from 1 July 2022 in accordance with Schedule LR Seven to encourage efficient outcomes by way of resource consent.

Managed reduction

LR P8 Require property/farming enterprise specific Nutrient Management Plans and require the implementation of mitigation actions including adopting good management practices to achieve and maintain Managed Reduction Targets and Nitrogen Discharge Allocations.

Use of rules

LR P9 Enable the continued use of land for low intensity farming, bush/scrub and forestry within the Lake Rotorua groundwater catchment.

LR P10 Manage farming activity within properties/farming enterprises that have an effective area exceeding 10 hectares where these have identified Nitrogen Discharge Allocations, Managed Reduction Targets and appropriate methods to achieve the staged reduction of nitrogen losses by 2032.

LR P11 Provide for lifestyle farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment greater than 5 hectares in effective area and up to and including 10 hectares in effective area that exceed the stocking rates contained in Schedule LR Two where these have provided Regional Council with a simplified Nutrient Management Plan and can demonstrate that their long term nitrogen loss will be no more than 80% of the drystock reference file average.

LR P12 Provide for the conversion of Māori land held under Te Ture Whenua Māori Act from forestry and bush/scrub to low intensity farming activities collectively up to 800 hectares and individually to the drystock Lower Nitrogen Discharge Allocation range boundary contained in Schedule LR One where these have provided Nutrient Management Plans and can demonstrate that the land has had reduced development opportunities in the past and the land is suitable for drystock farming, while also ensuring that any adverse effects on water quality in Lake Rotorua are appropriately mitigated.

LR P12A Allocate 5tN/y to settlement land to enable its conversion from plantation forestry and bush/scrub to other activities for use in accordance with an approved Nutrient Management Plan to provide for the owners' social, economic and cultural wellbeing while maintaining and safeguarding the land's mauri.

LR P13 Avoid the establishment or continued operation of farming activities within properties/farming enterprises within the Lake Rotorua groundwater catchment that are not permitted and have no identified or agreed Nitrogen Discharge Allocation and Managed Reduction Targets or have not provided Regional Council with a Nutrient Management Plan.

Use of Overseer

LR P14 Use Overseer version 6.2.0 for initial allocation purposes and subsequent versions to determine nitrogen losses from land.

LR P15 Consider the use of alternative nutrient budgeting models to determine nitrogen losses if Overseer is not suitable for modelling a farming activity. Consideration of whether alternative nutrient budgeting models may be used will take into account:

(a) The ability to reliably estimate a property/farming enterprise's long-term nitrogen loss;

(b) The acceptability of information inputs, for example, a robust and verifiable process for estimating leaching rates;

(c) The potential of suitably qualified and experienced persons to develop nutrient budgeting files;

(d) The application of the alternative budgeting model to the location, including climatic or physical conditions; and

(e) The effect on the allocation methodology meeting the 435tN load.

Any alternative to Overseer for nutrient budgeting purposes must be authorised by the Regional Council.

Assessment of Consent Applications

LR P16 Grant controlled activity and restricted discretionary activity consents for a duration of twenty years and non-complying activity consents, where granted, for durations less than 20 years. The duration of consent will reflect the nature, scale and robustness of any on-farm mitigation options proposed and any associated risk of not achieving the property/farming enterprise's 2032 Nitrogen Discharge Allocation.

LR P17 Only approve applications for non-complying activities where the application demonstrates that any adverse effects including the additional cumulative effect will not be contrary to the Lake Rotorua water quality objectives and policies being met.

Implementation matters

LR P18 Acknowledge the 435 tonne sustainable annual nitrogen load for Lake Rotorua set in Policy WL 3B of the Regional Policy Statement provides for nitrogen losses from both rural and urban land located within the Lake Rotorua groundwater catchment.

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

Methods of Implementation

The Regional Council will:

LR M1

Regional Council will supply information to Rotorua District Council 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;

(b) advises landowners of rural properties/farming enterprises identified in LR M1(a) to contact the Bay of Plenty Regional Council for further information and;

(c) identifies the minimum nitrogen losses required to be allocated to each new lot in accordance with LR M5(g) with this providing for:

(i) Losses from land;

(ii) Losses from sewage disposal (either reticulated or onsite);

(iii) Losses from general residential use.

LR M2

Regional Council will review and publish the science that determined the limits set in the Regional Policy Statement and the Regional Natural Resources Plan for Lake Rotorua on a five yearly basis commencing from 2017. These reviews will include:

(a) Review of trends in lake water quality attributes including nitrogen, phosphorus, Chlorophyll a, algal blooms, clarity, trophic level index for in-lake, inflows, and outflow where relevant;

(b) Review of progress towards achieving the Regional Policy Statement Policy WL 6B(c) 2022 catchment nitrogen load target;

(c) Review of the Regional Policy Statement Policy WL 3B(c) catchment nitrogen load, and a nominal phosphorus (external) catchment load of 37 tP/yr[67], 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 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 loss rates, groundwater trends and attenuation rates, including Overseer or similar estimates;

(iii) review of the assumptions behind and inputs into the lake model, ROTAN, catchment nitrogen and phosphorus loads (including attenuation), and any other model, limit or target relied upon.

(iv) an assessment of the efficacy and risks of alum dosing and an assessment of land-based phosphorus loss mitigation;

(v) scenario runs of the lake model, ROTAN or Overseer for sensitivity analysis;

(d) Review of relevant New Zealand and international lake water quality remediation science;

(e) Recommendations to Regional Council to consider whether any action is appropriate;

(f) Any science review and recommendations completed under LR M2 will be peer reviewed by a suitable qualified independent expert.

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

LR M3 Regional Council will respond to the recommendations that result from LR P4 reviews and 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 to ensure consents are aligned to the required water quality targets.

LR M4 Regional Council will monitor permitted activities and any developing technologies to ensure that any related risks of nutrient loss to the catchment are understood to inform future plan changes and a review of permitted activity thresholds if required.

LR M5 Regional Council will:

(a) develop and maintain a Rule Implementation Plan to ensure accurate and consistent interpretation and implementation by Regional Council and the public;

(b) report on the achievement of the Rule Implementation Plan on a five-yearly basis through plan effectiveness reporting;

(c) develop and maintain a Nitrogen Discharge Allocation Register, that will monitor catchment-wide progress towards meeting the Regional Policy Statement Policy WL 3B(c) catchment nitrogen load;

(d) provide land advisory services and incentives to support land use management practices and/or land use change that reduces nitrogen and phosphorus loss in the catchment;

(e) encourage and support good management practices to be implemented on rural properties/farming enterprises to reduce nitrogen and phosphorus loss in the catchment;

(f) work with land owners, the community and industry experts to facilitate local community efforts to improve the water quality of Lake Rotorua;

(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 predetermine any current or future consent process (including any consent conditions). The accounting methodology should recognise:

(i) 2001-04 is the baseline for accounting purposes;

(ii) Land use change (including subdivision) must not increase the total nitrogen load to Lake Rotorua and requires sufficient nitrogen allocation (i.e. Nitrogen Discharge Allocation, offset, to meet OSET Plan requirements, or where settlement land is converted to urban use, available nitrogen as demonstrated by the nitrogen accounting system);

(iii) Offsets within the groundwater catchment;

(h) collate and publish material about land based actions and research that manage and reduce phosphorus losses from the Lake Rotorua groundwater catchment;

(i) prioritise efforts on stream catchments which contribute to the phosphorus load to Lake Rotorua. In particular, Regional Council will support the development of catchment strategies and implementation plans in partnership with landowners and industry experts to identify critical source areas and management approaches reduce phosphorus losses.

(j) monitor the performance of the reference file methodology in relation to Overseer version change and application at the individual block and property/farming enterprise level; and

(k) establish a register of emerging issues, potential additions to, and changes to recommended application practice for, the Overseer model, and provide regular updates to the managers of the model.

Rules

Rules LR R1 to LR R13 apply to the management of land use activities on properties/farming enterprises in the Lake Rotorua groundwater catchment for the purpose of managing nitrogen loss from land where it could enter Lake Rotorua.

General Advisory Notes for Rules

1 In accordance with the Resource Management Act 1991 section 86B(3)(a) the following rules all have legal effect on and from 29 February 2016, being the date plan change 10 was publicly notified.

2 In instances where a property/farming enterprise is located partly within the Lake Rotorua groundwater catchment and partly in another groundwater catchment, only the area within the Lake Rotorua groundwater catchment is subject to the LR Lake Rotorua Nutrient Management rules. Regardless of this, Bay of Plenty Regional Council will encourage a holistic property-based approach to reducing nitrogen loss wherever possible.

3 Discharges of nitrogen and phosphorous from on-site effluent treatment systems (including septic tanks) are addressed by provisions in the Bay of Plenty On-Site Effluent Treatment Regional Plan. Where an on-site effluent treatment system requires a consent under the On-Site Regional Effluent Treatment Regional Plan, the activity will be assessed in accordance with the On-Site Effluent Treatment Regional Plan.

4 Provisions in the Regional Natural Resources Plan that manage land, water, discharges, and land use activities still apply to activities managed under the LR Lake Rotorua Nutrient Management part of this plan. Where there is an overlap between other regional plan provisions the more restrictive activity status or more stringent conditions to permitted rules apply.

5 Templates for consent applications and information reporting requirements will be provided electronically and in hard copy.

6 Until 1 January 2025, additional consent requirements under the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 may apply to changes of land use in the Lake Rotorua groundwater catchment over and above those required under the LR Lake Rotorua Nutrient Management rules.

Land Use Rules

LR R1

Permitted – Until 30 June 2017, the use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment

The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment is a permitted activity until 30 June 2017 subject to the following condition:

(a) There is no increase in the nitrogen loss from land resulting from an increase in effective area, nitrogen inputs or stocking rates from 29 February 2016.

LR R2

Permitted – From 1 July 2017, the use of land for plantation forestry or bush/scrub

From 1 July 2017, the use of land for plantation forestry or bush/scrub in the Lake Rotorua groundwater catchment is a permitted activity subject to the following conditions:

(a) The land use remains in plantation forestry with no more than a two year interval between harvesting and replanting or upon harvesting the land is permanently retired; or

(b) The land use remains in bush/scrub and is not used for grazing; and

(c) There is no transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets either to or from the property/farming enterprise prior to 2022.

Advisory Note

1 Plantation forestry and bush/scrub may be managed as part of a pastoral property/farming enterprise.

LR R3

Permitted – From 1 July 2017, the use of land for farming activities on properties/farming enterprises 5 hectares or less in effective area

Farming activities on properties/farming enterprises 5 hectares or less in effective area in the Lake Rotorua groundwater catchment are a permitted activity from 1 July 2017 subject to the following conditions:

(a) No commercial cropping or commercial horticulture or commercial dairying occurs on the land; and

(b) There is no transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets either to or from the property/farming enterprise prior to 2022.

Advisory Note

1 If the land use does not meet the conditions of LR R3, it may be permitted by LR R5 (until 30 June 2022) or LR R7 or consent will be required by LR R8.

LR R4

Permitted – From 1 July 2017, the use of land for farming activities on properties/farming enterprises greater than 5 hectares in area and up to and including 10 hectares in effective area

The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment greater than 5 hectares in area and up to and including 10 hectares in effective area is a permitted activity from 1 July 2017 subject to the following conditions:

(a) The stocking rate that occurs on the effective area does not exceed the stocking rates specified in Schedule LR Two at any point in time; and

(b) No commercial cropping or commercial horticulture occurs on the land; and

(c) There is no increase in the nitrogen loss from land resulting from an increase in effective area or nitrogen inputs from 29 February 2016; and

(d) There is no transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets either to or from the property/farming enterprise

prior to 2022.

Advisory Note

1 Schedule LR Two provides permitted activity stocking rates to enable the calculation of stock unit numbers to meet the requirements of LR R4.

2 If the land use does not meet the conditions of LR R4, it may be permitted under LR R5 or LR R6 (until 30 June 2022). As of 1 July 2022, consent will be required under LR R8 unless permitted by LR R7.

LR R5

Permitted – From 1 July 2017 until 30 June 2022, the use of land for farming activities on properties/farming enterprises greater than 10 hectares in effective area and less than 40 hectares in effective area or that are not permitted under Rules LR R3 or LR R4

The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment:

1 Greater than 10 hectares in effective area and less than 40 hectares in effective area; or

2 Greater than 5 hectares in area and up to and including 10 hectares in effective area but the land use does not comply with LR R4(a) and LR R4(b); or

3 5 hectares or less in area but the land use does not comply with LR R3(a).

is a permitted activity from 1 July 2017 until 30 June 2022 subject to the following conditions:

(a) There is no increase in the nitrogen loss from land resulting from an increase in effective area, nitrogen inputs or stocking rates from 29 February 2016; and

(b) Annual land use information records, as required in Schedule LR Three must be submitted by 31 October each year from and including 2017; and

(c) There is no transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets either to or from the property/farming enterprise prior to 2022.

Advisory Note

1 If properties/farming enterprises less than 40 hectares in effective area do not meet the conditions of LR R5, they may still be permitted by LR R7 or consent will be required under LR R8 after 2022.

2 This rule applies to properties in the Lake Rotorua groundwater catchment that were previously managed by RL R1 (Rule 11) – RL R7 (Rule 11F). Properties within the catchment that were not managed by Rules RL R1 (Rule 11) – RL R7 (Rule 11F) (see Schedule LR Four Map LR 2) are managed by LR R6.

LR R6

Permitted – From 1 July 2017 until 30 June 2022, the use of land for farming activities on properties/farming enterprises not previously managed by Rules RL R1 (Rule 11) to RL R7 (Rule 11F)

The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment that:

1 Has not been previously managed by RL R1 (Rule 11) – RL R7 (Rule 11F) as shown in Schedule LR Four on Map LR 2; or

2 Is not otherwise permitted in LR R2, LR R3, LR R4 or LR R5;

is a permitted activity until 30 June 2022 subject to the following conditions:

(a) The majority (greater than 50% by title area) of the property has not been previously managed by RL R1 (Rule 11) – RL R7 (Rule 11F); and

(b) There is no increase in the nitrogen loss from land resulting from an increase in effective area, nitrogen inputs or stocking rates from 29 February 2016; and

(c) Annual land use information records, as prescribed in Schedule LR Three must be submitted by 31 October each year from and including 2017; and

(d) There is no transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets either to or from the property/farming enterprise prior to 2022.

Advisory Note

1 Rule LR R6 applies to properties/farming enterprises that are not located in the surface water catchment of Lake Rotorua, but are located in the groundwater catchment of Lake Rotorua as shown in Schedule LR Four Map LR 2.

2 From 2022 if properties/farming enterprises in the Lake Rotorua groundwater catchment not previously managed by RL R1 (Rule 11) – RL R7 (Rule 11F) do not meet the permitted conditions of LR R3, LR R4, LR R6 or LR R7 they will be managed by LR R8.

3 Properties/farming enterprises with 50% or more of the title area subject to RL R1 (Rule 11) – RL R7 (Rule 11F) will be managed by LR R3, LR R4, LR R5 or LR R9.

LR R7

Permitted – From 1 July 2017, the use of land for low intensity farming activities on properties/farming enterprises

The use of land for low intensity farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment, is a permitted activity from 1 July 2017, where the nitrogen loss from:

1 the effective area is less than 57% of the nitrogen loss rate generated by the drystock reference file prescribed in Schedule LR Five (excluding areas of grazed trees that existed in the 2001-04 period);

2 the effective area of grazed trees that existed in the 2001-04 period does not exceed the nutrient benchmarked discharge rate or if not nutrient benchmarked the average nutrient benchmark discharge rate for grazed trees.

subject to the following conditions:

(a) Landowners must submit an Overseer file and every three years thereafter, prepared by a suitably qualified and experienced person, demonstrating that the effective area (excluding areas of grazed trees that existed in the 2001-04 period) complies with the definition of low intensity farming and the grazed trees effective area does not exceed

the nutrient benchmarked discharge rate or if not nutrient benchmarked the average nutrient benchmark discharge rate for grazed trees;

and either 1 or 2:

1 Land use information records must be submitted on an annual basis, by 31 October each year to confirm that the activities and practices within the effective area of the property/farming enterprise and areas of land use (including fodder cropping, cultivated area and land clearance) remain the same or less than that recorded within the Overseer file from (a);

2 Provide a new Overseer file, prepared by a suitably qualified and experienced person, demonstrating that the property/farming enterprise's nitrogen loss from the effective area meets the requirements described in (a).

(b) There is no transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets either to or from the property/farming enterprise prior to 2022;

(c) There is no increase in the nitrogen loss from land resulting from an increase in effective area or nitrogen inputs from 29 February 2016.

LR R8

Controlled – The use of land for farming activities on properties/farming enterprises less than 40 hectares in effective area, or not previously managed by Rules RL R1 (Rule 11) to RL R7 (Rule 11F), or where neither meet permitted activity conditions

The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment where:

1 The property/farming enterprise is less than 40 hectares in effective area; or

2 The property/farming enterprise was not previously managed by RL R1 (Rule 11) – RL R7 (Rule 11F) as shown in Schedule LR Four Map LR 2; or

3 The activity does not comply with permitted activity conditions for the use of land for farming activities;

is a controlled activity subject to the following conditions:

(a) A 2032 Nitrogen Discharge Allocation and relevant Managed Reduction Targets have been determined for the land in accordance with Schedule LR One and LR P6; and

(b) A Nutrient Management Plan has been prepared for the property/farming enterprise, and certified by a suitably qualified and experienced person that the Nutrient Management Plan has been prepared in accordance with Schedule LR Six.

The Regional Council reserves its control over the following matters:

(i) The approval of the 2032 Nitrogen Discharge Allocation and Managed Reduction Targets for the land subject to the application, set in accordance with Schedule LR One and LR P6.

(ii) Setting of the appropriate frequency for the submission of an Overseer file, prepared by a suitably qualified and experienced person, demonstrating implementation of the Nutrient Management Plan.

(iii) The requirement for contractual written agreement with the land owner of any leased land agreeing to proposed nitrogen loss mitigations to be undertaken on that land.

(iv) The form of information and documentation to support the Overseer

file including data inputs and protocols.

(v) Circumstances that may require a review of a Nitrogen Discharge Allocation, Nutrient Management Plan or consent conditions including a change to property size, the sale or disposal of land, permanent removal of Nitrogen Discharge Allocation from the catchment, changes in lease arrangements, significant farm system changes and subdivision, or changes to the Regional Policy Statement or Regional Natural Resources Plan resulting from LR M2 and LR M3.

(vi) Implementation of the Nutrient Management Plan, including the mitigations and methodology to be used to meet the Managed Reduction Targets and Nitrogen Discharge Allocation.

(vii) Self-monitoring, record keeping, information provision and site access requirements to demonstrate on-going compliance with the Nutrient Management Plan.

(viii) The duration of the consent to reflect the nature, scale and robustness of any on-farm mitigation options proposed and LR P16.

Applications for controlled activities under this rule do not require the written approval of affected persons and shall not be publicly notified except where the Regional Council considers special circumstances exist in accordance with section 95A(9) of the Act.

LR R8A

Controlled – The use of land for lifestyle farming activities on properties/farming enterprises greater than 5 hectares in effective area and up to and including 10 hectares in effective area

The use of land for lifestyle farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment where the property/farming enterprise is greater than 5 hectares in effective area and up to and including 10 hectares in effective area is a controlled activity subject to the following conditions:

(a) 2032 nitrogen loss targets have been determined for the land equivalent to 80% of the drystock reference file referred to in Table LR 5 for the effective area (excluding areas of grazed trees); and

(b) A Simplified Nutrient Management Plan has been prepared for the lifestyle farming activity and has been certified by the Regional Council and that shows reductions (if required) in nitrogen loss over time to meet the 2032 nitrogen targets.

The Regional Council reserves its control over the following matters:

(i) The approval of the nitrogen loss reduction requirements targets set in relation to the lifestyle farming activity.

(ii) The relevant matters in Schedule LR Six as elements of a Simplified Nutrient Management Plan for the property/farming enterprise.

(iii) Setting of the appropriate frequency for the submission of information demonstrating implementation of the Simplified Nutrient Management Plan.

(iv) Circumstances that may require a review of nitrogen loss reduction requirements, the Simplified Nutrient Management Plan or consent conditions including a change to property size, the sale or disposal of land or changes to the Regional Policy Statement or Regional Natural Resources Plan resulting from LR M2 and LR M3.

(v) Implementation of the Simplified Nutrient Management Plan, including the mitigations and methodology to be used to meet the nitrogen loss reduction requirements.

(vi) Self-monitoring, record keeping, information provision and site access requirements to demonstrate on-going compliance with the

Simplified Nutrient Management Plan.

(vii) The duration of the consent to reflect the nature, scale and robustness of any on-farm mitigation options proposed and LR P16.

Applications for controlled activities under this rule do not require the written approval of affected persons and shall not be publicly notified except where the Regional Council considers special circumstances exist in accordance with section 95A(9) of the Act.

Advisory Note

1 Templates for Simplified Nutrient Management Plans and descriptions of stocking rates to meet 80% of the drystock reference file are available from the Bay of Plenty Regional Council.

LR R9

Controlled – From 1 July 2017, the use of land for farming activities on properties/farming enterprises that are 40 hectares or more in effective area

The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment where:

1 The property/farming enterprise is 40 hectares or more in effective area; and

2 The activity does not comply with the permitted activity conditions in LR R7;

is a controlled activity from 1 July 2017 subject to the following conditions:

(a) A 2032 Nitrogen Discharge Allocation and relevant Managed Reduction Targets have been determined for the land in accordance with Schedule LR One and LR P6; and

(b) A Nutrient Management Plan has been prepared for the property/farming enterprise, certified by a suitably qualified and experienced person that the Nutrient Management Plan has been prepared in accordance with Schedule LR Six.

The Regional Council reserves its control over the following matters:

(i) The approval of the 2032 Nitrogen Discharge Allocation and Managed Reduction Targets for the land subject to the application, set in accordance with Schedule LR One and LR P6.

(ii) Setting of the appropriate frequency for the submission of an Overseer file prepared by a suitably qualified and experienced person, demonstrating implementation of the Nutrient Management Plan.

(iii) The requirement for contractual written agreement with the land owner of any leased land agreeing to proposed nitrogen loss mitigations to be undertaken on that land.

(iv) The form of information and documentation to support the Overseer file, including data inputs and protocols.

(v) Circumstances that may require a review of a Nitrogen Discharge Allocation, Nutrient Management Plan or consent conditions including a change to property size, the sale or disposal of land, permanent removal of Nitrogen Discharge Allocation from the catchment, changes in lease arrangements, significant farm system changes and subdivision, or changes to the Regional Policy Statement or Regional Natural Resources Plan resulting from LR M2 and LR M3.

(vi) Implementation of the Nutrient Management Plan, including the mitigations and methodology to be used to meet the Managed

Reduction Targets and Nitrogen Discharge Allocation.

(vii) Self-monitoring, record keeping, information provision and site access requirements to demonstrate on-going compliance with the Nutrient Management Plan.

(viii) The duration of the consent to reflect the nature, scale and robustness of any on-farm mitigation options proposed and LR P16.

Applications for controlled activities under this rule do not require the written approval of affected persons and shall not be publicly notified except where the Regional Council considers special circumstances exist in accordance with section 95A(9) of the Act.

LR R10

Controlled – From 1 July 2022, the transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets between properties/farming enterprises

The transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets between properties/farming enterprises in the Lake Rotorua groundwater catchment that occurs after 1 July 2022 is a controlled activity subject to the following conditions:

(a) Any transfer of a Nitrogen Discharge Allocation or Managed Reduction Offsets complies with Schedule LR Seven;

(b) A new 2032 Nitrogen Discharge Allocation and new Managed Reduction Targets have been determined for both the source and destination land in accordance with Schedule LR One and LR P6; and

(c) A Nutrient Management Plan has been prepared for both the source and destination land, and certified by a suitably qualified and experienced person that each Nutrient Management Plan has been prepared in accordance with Schedule LR Six, except where the source land is in plantation forestry in which case no source land Nutrient Management Plan is required.

The Regional Council reserves its control over the following matters:

(i) The approval of the 2032 Nitrogen Discharge Allocation and Managed Reduction Targets for the land subject to the application, set in accordance with Schedule LR One and LR P6.

(ii) Setting of the appropriate frequency for the submission of an Overseer file or, prepared by a suitably qualified and experienced person, demonstrating implementation of the Nutrient Management Plan.

(iii) The requirement for contractual written agreement with the land owner of any leased land agreeing to proposed nitrogen loss mitigations to be undertaken on that land.

(iv) The form of information and documentation to support the Overseer file or alternative nutrient budgeting file, including data inputs and protocols.

(iv) Circumstances that may require a review of a Nitrogen Discharge Allocation, Nutrient Management Plan or consent conditions including a change to property size, the sale or disposal of land, changes in lease arrangements, significant farm system changes and subdivision, or changes to the Regional Policy Statement or Regional Natural Resources Plan resulting from LR M2 and LR M3.

(v) Implementation of the Nutrient Management Plan, including the mitigations and methodology to be used to meet the Managed Reduction Targets and Nitrogen Discharge. Allocation.

(vi) Self-monitoring, record keeping, information provision and site access requirements to demonstrate on-going compliance with the Nutrient Management Plan.

(vii) The duration of the consent to reflect the nature, scale and robustness of any on-farm mitigation options proposed and LR P16.

Applications for controlled activities under this rule do not require the written approval of affected persons and shall not be publicly notified except where the Regional Council considers special circumstances exist in accordance with section 95A(9) of the Act.

Advisory Note

1 Transfer does not include the permanent removal of Nitrogen Discharge Allocation from the catchment by any person or organisation for the removal from the system or for offsetting purposes.

2 Managed Reduction Offsets can be used to meet 2022 and 2027 Managed Reduction Targets.

3 The transfer of nitrogen between properties either as Managed Reduction Offsets (short term trading) or Nitrogen Discharge Allocations (long term trading) is implemented by the issuing of new resource consents and new Nutrient Management Plans for the source and destination land.

LR R11

Controlled – The use of land for farming activities on properties/farming enterprises where Overseer is not suitable for modelling

The use of land for farming activities on properties/farming enterprises in the Lake Rotorua groundwater catchment:

1 From 1 July 2017, that are 40 hectares or greater in effective area; and

2 From 1 July 2022, that are less than 40 hectares in effective area unless otherwise permitted by LR R3 to LR R7;

where Overseer is not suitable for modelling the farming activity is a controlled activity subject to the following conditions:

(a) A 2032 Nitrogen Discharge Allocation and relevant Managed Reduction Targets have been determined for the land in accordance with Schedule LR One and LR P6;

(b) A Nutrient Management Plan has been prepared for the property/farming enterprise, and certified by a suitably qualified and experienced person that the Nutrient Management Plan has been prepared in accordance with Schedule LR Six; and

(c) An authorised alternative nutrient budgeting model is used.

The Regional Council reserves its control over the following matters:

(i) The extent or proportion of nitrogen reductions required and estimates of nitrogen reductions likely to be achieved.

(ii) The requirement for contractual written agreement with the land owner of any leased land agreeing to proposed nitrogen loss mitigations to be undertaken on that land.

(iii) The specification of the 2032 Nitrogen Discharge Allocation and Managed Reduction Targets for the land subject to the application, set in accordance with Schedule LR One and LR P6.

(iv) Setting of the appropriate frequency for the submission of information prepared by a suitably qualified and experienced person, demonstrating implementation of the Nutrient Management Plan.

(v) The form of information and documentation to support the alternative

nutrient budgeting model.

(vi) Circumstances that may require a review of a Nitrogen Discharge Allocation, Nutrient Management Plan or consent conditions including a change to property size, the sale or disposal of land, changes in lease arrangements, significant farm system changes and subdivision, or changes to the Regional Policy Statement or Regional Natural Resources Plan resulting from LR M2 and LR M3.

(vii) Implementation of the Nutrient Management Plan, including the mitigations and methodology to be used to meet the Managed Reduction Targets and Nitrogen Discharge Allocation.

(viii) Self-monitoring, record keeping, information provision and site access requirements to demonstrate on-going compliance with the Nutrient Management Plan.

(ix) The duration of the consent to reflect the nature, scale and robustness of any on-farm mitigation options proposed and LR P16.

Applications for controlled activities under this rule do not require the written approval of affected persons and shall not be publicly notified except where the Regional Council considers special circumstances exist in accordance with section 95A(9) of the Act.

LR R11A

Restricted Discretionary – Land use change from plantation forestry or bush/scrub on land subject to the Te Ture Whenua Māori Act to low intensity farming

The conversion of plantation forestry and/or bush/scrub on land subject to the Te Ture Whenua Māori Act to drystock within the Lake Rotorua groundwater catchment is a Restricted Discretionary activity subject to the following conditions:

(a) A Nutrient Management Plan has been prepared for the land proposed to be converted, and certified by a suitably qualified and experienced person that the Nutrient Management Plan has been prepared in accordance with Schedule LR Six;

(b) The proposed activity shall be low intensity farming (drystock);

(c) If the area of land proposed to be converted is in production forestry, it shall be harvested or will be harvested within 5 years of resource consent being granted;

(d) If the area of land proposed to be converted to drystock farming is in bush/scrub, this shall occur within 5 years of resource consent being granted;

(e) No more than 800 hectares of effective area in total shall be converted to drystock farming under the provisions of this rule;

(f) Suitable good management practices shall be identified and implemented that will reduce or avoid potential adverse effects of the drystock activity;

(g) There is no transfer of nitrogen to or from the drystock farming enterprises created by the conversion prior to 2022.

The Regional Council restricts its discretion to the following matters:

(i) Information provided to demonstrate that the land has reduced development opportunities due to historical cultural and/or economic reasons.

(ii) The suitability of the land for drystock farming and any methods proposed to mitigate any adverse effects on the water quality in Lake Rotorua.

(iii) The expiry of the allocation, or portion of the allocation where this has not been utilised within a specified timeframe (within 5 years for bush

and scrub or a specified timeframe after harvesting of production forestry).

(iv) Setting of the appropriate frequency for the submission of an annual Overseer file, prepared by a suitably qualified and experienced person, demonstrating implementation of the Nutrient Management Plan.

(v) The form of information and documentation to support the Overseer file including data inputs and protocols.

(vi) Self-monitoring, record keeping, information provision and site access requirements to demonstrate on-going compliance with a Nutrient Management Plan.

(vii) The duration of the consent to reflect the nature, scale and robustness of any on-farm mitigation options proposed and LR P16.

Advisory Note

1 Until 1 January 2025, the conversion of plantation forestry to pastoral land use is also subject to the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 and may need a discretionary activity consent under Regulation 17.

LR R11B

Controlled - Land use change from plantation forestry or bush/scrub on settlement land in accordance with Policy LR P12A

The conversion of plantation forestry and/or bush/scrub on settlement land to other land uses within the Lake Rotorua groundwater catchment in accordance with LR P12A is a controlled activity subject to the following conditions:

(a) No more than a combined total of 5 tonnes of nitrogen per year (based on Overseer Version 6.2.0) may be authorised under the provisions of this rule in addition to the relevant Nitrogen Discharge Allocations applying to forestry or bush/scrub respectively;

(b) A 2032 Nitrogen Discharge Allocation has been determined for the land area subject to a change of use in accordance with Schedule LR One and LR P6;

(c) The land use change does not occur before 2032 unless:

(i) Nitrogen has been made available by transfer equivalent to the amount sought for the land use change; or

(ii) The Regional Council has identified that sufficient nitrogen is available within the nitrogen accounting system to enable the land use change;

(d) A Nutrient Management Plan has been prepared for the new land use, and certified by a suitably qualified and experienced person to have been prepared in accordance with Schedule LR Six; and

(e) Suitable good management practices have been identified for implementation that will avoid or reduce the potential adverse effects of the land use activity.

The Regional Council reserves its control over the following matters:

(i) The approval of the 2032 Nitrogen Discharge Allocation for the land subject to the application, set in accordance with Schedule LR One and LR P6.

(ii) The suitability of the land for the purposes set out in LR P12A and any methods proposed to avoid, remedy or mitigate any adverse effects

on the water quality in Lake Rotorua.

(iii) The portion of the settlement land nitrogen allocation remaining to be allocated and any pre-2032 transfers of nitrogen allocation.

(iv) Setting an appropriate frequency for the submission of either:

(a) an Overseer file; or

(b) an alternative nutrient budgeting model, in accordance with LR P15, when Overseer is not suitable for modelling the land use activity;

prepared by a suitably qualified and experienced person, demonstrating implementation of the Nutrient Management Plan.

(v) The form of information and documentation to support either:

(a) an Overseer file including data inputs and protocols; or

(b) an alternative nutrient budgeting model, including data inputs and protocols in accordance with LR P15, when Overseer is not suitable for modelling the land use activity.

(vi) The adequacy of self-monitoring, record keeping, information provision and site access requirements to demonstrate on-going compliance with a Nutrient Management Plan.

(vii) The duration of the consent to reflect the nature, scale and robustness of any land use mitigation options proposed and LR P16.

(viii) Circumstances that may require a review under Section 128 of a Nitrogen Discharge Allocation, Nutrient Management Plan or consent conditions including a change to activity size, the sale or disposal of land, changes in lease arrangements, significant farm system changes and subdivision, or changes to the Regional Policy Statement or Regional Natural Resources Plan resulting from LR M2 and LR M3.

(ix) Implementation of the Nutrient Management Plan, including the mitigations and methodology to be used to meet the Nitrogen Discharge Allocation.

(x) The requirement for a contractual written agreement with the landowner of any leased land agreeing to proposed nitrogen loss mitigation to be undertaken on the land.

Applications for controlled activities under this rule do not require the written approval of affected persons and shall not be publicly notified except where the Regional Council considers special circumstances exist in accordance with section 95A(9) of the Act.

Advisory Note

1 The Regional Council will consider sufficient nitrogen to be available to enable the land use change under condition (c) of this rule only where, and to the extent that, it has implemented reductions in the amount of nitrogen allocated to existing land uses by way of new consents granted after 16 November 2022 or Nitrogen Discharge Allocation has been surrendered and available nitrogen is demonstrated by the nitrogen accounting system.

LR R11C

Controlled – Review of resource consents

Lake Rotorua nutrient management resource consents issued before 16 November 2022 may be reviewed under sections 128 and 129 of the Act to ensure Nitrogen Discharge Allocations that apply at 1 July 2032 give effect to Table LR 6A.

LR R12

Non-complying – The use of land for farming activities with non-point source loss of nitrogen from land use activities that do not meet the conditions of permitted, controlled or restricted discretionary rules

The use of land for farming activities with non-point source loss of nitrogen from land use activities that is not otherwise authorised by permitted, controlled activity or restricted discretionary rules is a non- complying activity.

Discharge Rule

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:

(a) the land use associated with the discharge is authorised under LR R1 to LR R11B; and

(b) the discharge is not a discretionary activity under Resource Management (National Environmental Standards for Freshwater) Regulations 2020.

Schedule LR One – Methodology to determine Start Points, Managed Reduction Targets and Nitrogen Discharge Allocations

Start Points, Managed Reduction Targets and Nitrogen Discharge Allocations must be calculated and authorised by the Regional Council.

Start Points, Managed Reduction Targets and Nitrogen Discharge Allocations are expressed as a percentage of the relevant reference file (see Schedule LR Five).

A. Start Points and Nitrogen Discharge Allocations

The Start Points from which the 2032 Nitrogen Discharge Allocations are calculated are set out in Table LR 4 below.

For nutrient benchmarked properties - the nutrient benchmark, land use and effective area are defined by, and are what existed in, the 2001-04 period. For non nutrient benchmarked properties the Derived Benchmark is the lower range boundary of the 2001-04 Benchmark Nitrogen Discharge Allocation as set out in Table LR 5, and the land use and effective area are what existed in the 2002/03 period. Any lawful change is taken into account. All nutrient benchmark information is converted to Overseer 6.2.0 for the purpose of calculating Nitrogen Discharge Allocations.

Table LR 4 Start Points and Nitrogen Discharge Allocations

Rules category	RL R1 (Rule 11) – RL R7 (Rule 11F) status	Nitrogen management Start Point	2032 Nitrogen Discharge Allocation
40 ha or greater	Benchmarked	Actual Benchmark (From Benchmarked land use and effective area).	Actual Benchmark and land use applied to allocation methodology.
	Not Benchmarked	Derived Benchmark (Function of 2001-04 sector nutrient benchmark lower range boundary, and 2002-03 land use and effective area) unless evidence of significant farm system change.	Derived Benchmark and land use applied to allocation methodology.
Between 10-40 ha Consented	Benchmarked	Actual Benchmark (From Benchmarked land use and effective area).	Actual Benchmark and land use applied to allocation methodology.

	Not Benchmarked	Derived Benchmark. (Function of 2001-04 sector nutrient benchmark lower range boundary and 2002-03 land use and effective area unless evidence of significant farm system change.)	Derived Benchmark and land use applied to allocation methodology.
Less than 40 ha 2017 Permitted 2022 Consented	Benchmarked	Actual Benchmark. (From Benchmarked land use and effective area).	Actual Benchmark and land use applied to allocation methodology.
	Not Benchmarked	Derived Benchmark. (Function of 2001-04 sector nutrient benchmark lower range boundary, and 2002-03 land use and effective area unless evidence of significant farm system change.)	Derived Benchmark and land use applied to allocation methodology.
For properties/farming enterprises within the Lake Rotorua groundwater catchment that were not previously managed under RL R1 (Rule 11) to RL R7 (Rule 11F) (LR R8)	Not Benchmarked	Derived Benchmark (This will be created through the application of Overseer to the actual land use and effective area in place during the 36 month period ending on 01 January 2016.)	Derived Benchmark and land use applied to allocation methodology

B. Nitrogen Discharge Allocation Methodology

The following process will be used to calculate Nitrogen Discharge Allocations for all dairy and drystock blocks. For house blocks, plantation forestry and bush/scrub no reductions are required.

(a) Take Actual or Derived Benchmark from Table LR 4.

(b) Apply the standard sector % reduction (from Table LR 5) for all blocks except:

(i) Those blocks where the nutrient benchmark is already below the relevant Nitrogen Discharge Allocation sector range; or

(ii) Those blocks where applying the standard sector percent reduction would cause the Nitrogen Discharge Allocation to fall below the relevant Nitrogen Discharge Allocation sector range, where in both cases the Nitrogen Discharge Allocation shall be set at the bottom value of the relevant Nitrogen Discharge Allocation sector range.

(iii) No property/farming enterprise will be required to reduce its nitrogen loss below the bottom of the relevant sector nitrogen loss range.

(c) Following the application of the standard sector % reduction (from Table LR 5), any block that is above the relevant Nitrogen Discharge Allocation sector range is assigned the upper value of that range.

A property's Nitrogen Discharge Allocation equals the sum of the allowable nitrogen losses for all of the blocks within the property (drystock, dairy, bush/scrub, plantation forestry and house block). Nitrogen Discharge Allocations are calculated in kg/N/ha/yr using Overseer 6.2.0 and are then expressed as a percentage of the relevant reference file.

The combination of parameters and figures in Table LR 5 below supports the allocation methodology that achieves the required reductions and sector contributions within the Integrated Framework:

Table LR 5 Allocation parameters and figures

	Dairy	Drystock
Standard sector % reduction	31.3%	20.0%
Nitrogen Discharge Allocation average	64.5	25.6
Lower Nitrogen Discharge Allocation range boundary	54.6	18.0
Upper Nitrogen Discharge Allocation range boundary	72.8	54.6
Sector contribution from Integrated Framework	35.3%	17.2%

Advisory Note

1 The Nitrogen Discharge Allocation average set out in Table LR 6A shows the average for blocks within the range. The application of the methodology results in some blocks being given an increase in relative NDA. The non nutrient benchmarked blocks receive the lower range boundary NDA of 18.0 kgN/ha/yr for drystock and 54.6 kgN/ha/yr for dairy.

2 The 2032 Nitrogen Discharge Allocations are subsequently adjusted using Table LR 6A.

C. *Managed Reduction Targets*

Managed Reduction Targets are the reductions required in each five-year timeframe which in total equal the difference between the Start Point and Nitrogen Discharge Allocation. They are calculated as a percentage of the total reduction required (as shown in Table LR 6) and will be expressed as percentages in relation to the relevant reference files (see Schedule LR Five).

If there is a need to recalculate a Nitrogen Discharge Allocation due to a transfer of Nitrogen Discharge Allocation the Managed Reduction Targets will be recalculated to maintain the same proportional rate of reduction.

Table LR 6 Managed Reduction Targets

Managed Reduction Target Date For 2017 Start	Integrated Framework reduction (tN/yr) to be achieved	% of total reduction required	Managed Reduction Targets as % of total reduction required
1 July 2022	44	31.4%	31.4%
1 July 2027	48	34.3%	65.7%
1 July 2032	48	34.3%	100.0%
	140	**100.0%**	

Managed Reduction Target Date For 2022 Start	% of total reduction required	Managed Reduction Targets as % of total reduction required
1 July 2022	N/A	N/A
1 July 2027	50%	50%
1 July 2032	50%	100%
	100%	

D. 2032 Nitrogen Discharge Allocation Adjustment

- The 2032 Nitrogen Discharge Allocations (NDA) for the dairy and drystock sectors are adjusted to deliver the outcomes specified in Table LR 6A.
- A standard reduction of 0.98% of the NDA across the dairy and drystock sectors is applied except that the lower range boundaries are maintained at their original positions.
- All existing Lake Rotorua nutrient management resource consents will have their conditions reviewed to reflect Table LR 6A.
- The Managed Reduction Targets for the period up to 1 July 2032 (from Table LR 6) remain the same in relation to the adjustment, i.e. the readjustment is only required from 1 July 2032.

Table LR 6A Adjusting allocation parameters and figures

	Dairy	Drystock
Further sector % reduction from NDA	0.98%	0.98%
Lower Nitrogen Discharge Allocation range boundary	54.6	18.0
Upper Nitrogen Discharge Allocation range boundary	72.08	54.06
Resulting kgN (Overseer 6.2.0)	2800 kg	2200 kg

E. Amendment of Nitrogen Discharge Allocation

The Nitrogen Allocations to the following blocks are amended as follows:

Table LR 6B Nitrogen allocation to settlement land (in Overseer 6.2.0)

Description	Original allocation	Reallocation	Adjusted allocation
Section 3-5 SO 388233, held in record of title 507546 (within the Lake Rotorua rural area)	6,770 kg	85.5% of 5tN	11,045 kgN
SA68A/368 (within the Lake Rotorua rural area)	1,679 kg	14.5% of 5tN	2,404 kgN

Advisory Note

1 The reallocated nitrogen set out in Table LR 6B remains in the Regional Council's nitrogen accounting system unused until drawn on for a particular consented activity. At the time a particular draw down occurs, an adjustment will be made to account for any changes in Overseer versions. Allocations to tourism, housing and similar activities will be adjusted in accordance with the House reference file system. Rural activities such as horticulture and market gardening will be adjusted in accordance with the drystock reference file system.

2 The allocations set out in Table LR 6B can be used for any land use complying with LR P12A and will be expressed using the appropriate reference file for the use.

F. Additional matters

- Exceptional circumstances may exist that imply a need to assess amendments to the Nitrogen Discharge Allocation calculations on a case by case basis. This may include consideration of previous on-farm nitrogen loss mitigations implemented on the property, lawfully established activities that result in nitrogen discharges and non-pasture low nitrogen discharge activities.
- Areas of trees that were grazed and that were nutrient benchmarked as pastoral will be allocated the current nutrient benchmarked allocation unless after applying the drystock reduction calculations the discharge is greater than the Permitted Activity level. If this occurs, the drystock calculation applies.
- Plantation forestry, bush/scrub and house blocks will be given a Nitrogen Discharge Allocation that equates the Overseer discharge rate for these land uses within the Lake Rotorua groundwater catchment.
- Non nutrient benchmarked grazed trees will be allocated the nutrient benchmarked grazed trees average discharge rate.
- Property/farming enterprises can apply to Regional Council for a review of nutrient benchmarks including derived benchmarks.

G. Amendment of Nitrogen Discharge Allocation

- Any amendment to Nitrogen Discharge Allocation that occurs due to subdivision, changes to property boundaries, addition of house blocks, contractual permanent removal of Nitrogen Discharge Allocation from the system or other circumstances must be authorised by the Regional Council.
- New lots created by way of subdivision will require a portion of the Nitrogen Discharge Allocation from the parent lot to be registered against each new title (Computer Freehold Register). This will need to be sufficient, in accordance with LR M1(c) and LR M5(g), to provide for potential losses from sewage disposal, residential activity losses from the land, and losses from any area available for farming activity.
- The creation of new properties may lead to the requirement for resource consent.
- The complete or partial transfer of the Nitrogen Discharge Allocation for a property may result in that property losing the ability to be subdivided in the future, unless the nitrogen deficit is addressed.

H. Non-Standard Circumstances

- If new farming activities are being established as a result of transferring Nitrogen Discharge Allocation to areas of plantation forestry or bush/scrub conversion, Nitrogen Discharge Allocations will be calculated and authorised by Regional Council on the basis of the additional discharge over and above the pre-conversion land use discharge rate. Tables LR 4 and LR 6 do not apply.
- Where Overseer is not suitable for modelling the farming activity, an authorised alternative nutrient budgeting model that meets LR P15 will be used to establish a Nitrogen Discharge Allocation and Managed Reduction Targets. In determining the extent or proportion of nitrogen reductions required for a property/farming enterprise Regional Council will adopt an approach that achieves an equivalent proportional reduction in nitrogen loss against comparable land uses or sector.

Schedule LR Two – Stocking rates

The following stocking rates show how many animals are allowed per hectare of effective area at any point in time to comply with the permitted activity rule LR R4. For mixes of stock classes, the total hectares required must sum to less than or equal to the property's effective area (in hectares). The below stocking rates comply with the permitted losses provided for by LR R4 and LR R7 and the definition of low intensity farming activity.

Stock class	Total animals by stock class allowed per hectare	Total hectares required per animal in each stock class
Horses		
Pony	2.1	0.48
Small horse (including w/foal)	1.6	0.64
Large horse (including w/foal)	1.0	0.96
Dairy		
Dairy bull	1.5	0.66
Dairy cow	0.9	1.15
Dairy heifer 1-2 years age	1.6	0.65
Dairy heifer calf (weaned)	3.5	0.29
Drystock		
Beef bull	1.5	0.68
Beef cow	1.3	0.79
Bull 1-2 years age	1.5	0.65
Steer 1-2 years age	1.8	0.56
Heifer 1-2 years age	1.7	0.58
Steer calf <1 year (weaned)	3.8	0.26
Bull calf <1 year (weaned)	3.5	0.29
Heifer calf <1 year (weaned)	3.0	0.33
Sheep		
Ram	15.5	0.06
Adult ewe	15.0	0.07
Sheep 1-2 years of age	14.2	0.07
Sheep <1 years of age (weaned)	25.9	0.04
Goats		
Bucks & does <1 year	24.9	0.04
Angora does	11.3	0.09
Feral does	13.8	0.07
Feral bucks & wethers	24.9	0.04
Deer		
Stag	4.9	0.21
Breeding hind	5.0	0.20

Stock class	Total animals by stock class allowed per hectare	Total hectares required per animal in each stock class
Hind 1-2 year	9.9	0.10
Stag 1-2 years age	13.2	0.08
Fawn (weaned)	15.2	0.07
Other		
Alpaca	15.4	0.06
Llama	7.7	0.13

For animal species not listed in Schedule LR Two (such as outdoor pigs) or for animal breeds significantly outside standard animal performance definitions*, the corresponding maximum stocking rate under permitted LR R4 is 10 Revised Stock Units per hectare. Note that a revised stock unit corresponds to an annual animal feed intake of 6000 Megajoules of Metabolisable energy which in turn equates to an annual pasture dry matter intake of approximately 550 kg.

* For the purposes of Schedule LR Two, the relevant standard animal performance definitions are listed in Table 1, Section 7.1 of *Methodology for creation of Nitrogen Discharge Allocation reference files and stocking rate table Version 2* (Perrin Ag Consultants Ltd, February 2016).

Advisory Note

1 The term *Feral goats* is the Overseer definition and applies only to goats within a farming operation.

2 If you are not sure how to assess Revised Stock Units or how to find the animal performance definitions, you should contact a land management officer at Bay of Plenty Regional Council.

Schedule LR Three – Information requirements for permitted rules LR R5 and LR R6

The following information shall be provided to the Bay of Plenty Regional Council annually. In cases where the land use has changed, but losses are considered to remain the same, additional information may be required. Information shall be provided in a Excel spreadsheet and shall include the following details:

(a) Contact details of landowner (and any leaseholder);

(b) Legal description of the land and farm identifier as provided by the Regional Council; and

(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 within the effective area (numbers, classes and ages) including a breakdown by month;

(e) Type, quantity and timing of effluent and fertiliser application within the effective area;

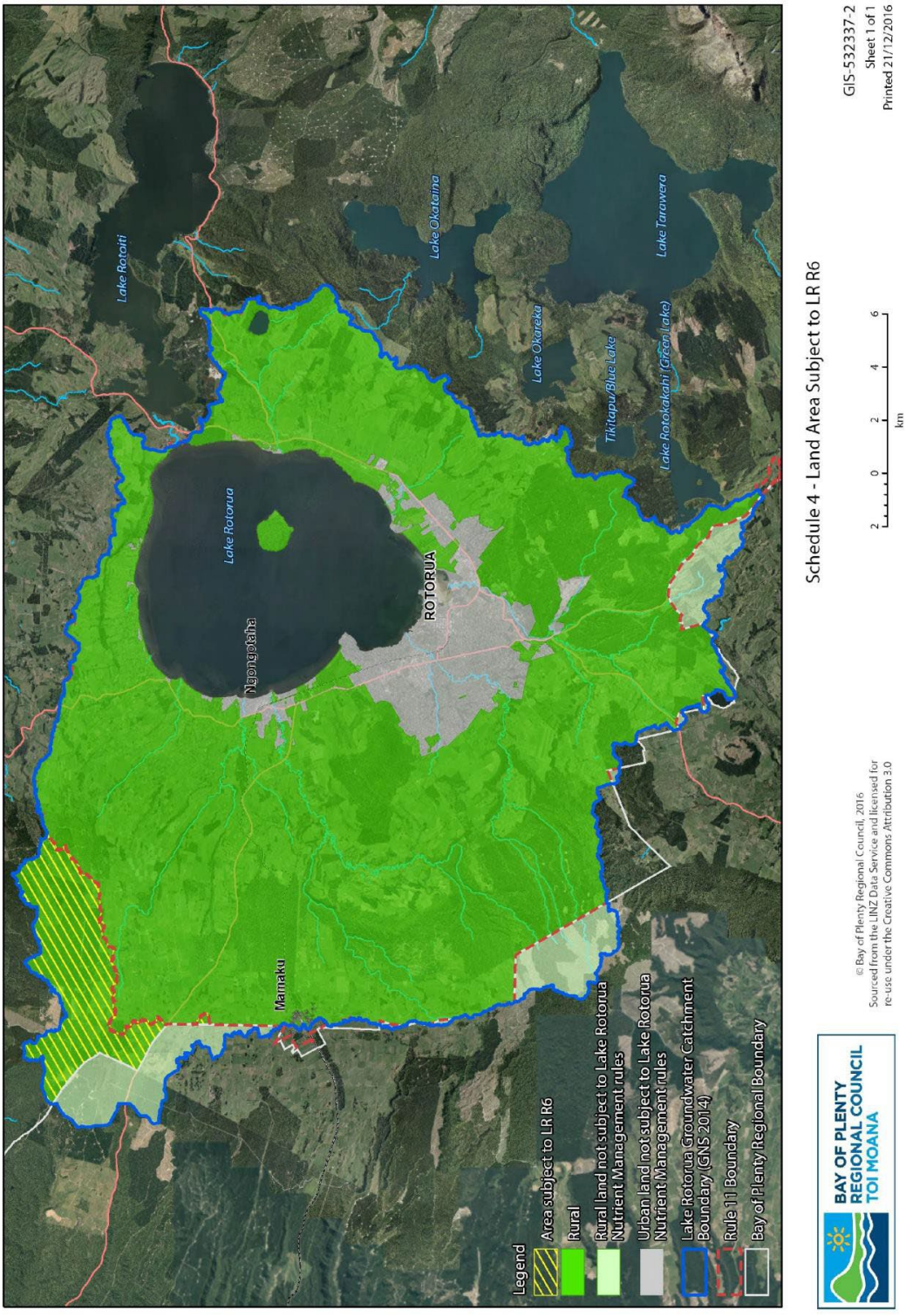
(f) Type, area and planting dates for crops (i.e. exported or on farm use) within the effective area;

(g) Type, quantity and source of supplementary feed within the effective area.

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. The information provided is required to be of sufficient detail to determine if the level of losses generated from the property/farming enterprise continue to comply with the level of nitrogen losses initially recorded in 2017.

Schedule LR Four – Land area subject to rules LR R6 and LR R8

Map LR 2 – Land area subject to Rules LR R6 and LR R8



Schedule LR Five – Use of Overseer and reference files

Introduction

The Overseer nutrient budgeting model is updated from time to time with new versions that reflect:

- Improvements to the model algorithms and the user interface;
- Additions of new farm systems, farm practices and mitigation options;
- Corrected software issues.

While each of these Overseer version updates represents progressive improvements, they may result (to varying degrees) in different nitrogen leaching outputs, even though the same farm inputs are entered. Some version updates will impact some farms, and some farm practices, more than others.

It is therefore appropriate to adopt an Overseer methodology that:

- Enables the latest version of Overseer to be used for every assessment (except for nitrogen discharge allocation purposes where version 6.2.0 applies) and so takes advantage of the best available science;
- Adjusts a property's Start Point, Managed Reduction Targets and 2032 Nitrogen Discharge Allocation in a way that enables a fair comparison with the property/farming enterprise's current nitrogen leaching rate, including when a new Nutrient Management Plan is generated every five years;
- Maintains reasonable Nitrogen Discharge Allocation relativity between properties/farming enterprises i.e. maintains the overall integrity of the nitrogen loss allocation method in Schedule LR One;
- Is understandable to landowners and managers;
- Enables effective compliance and reporting.

Use of reference files summary

Reference files are simplified single land use Overseer representations of the five main rural land uses in the Lake Rotorua catchment: drystock, dairy, fore stry, native bush/scrub and house blocks. These reference files are used to 'index' the initial nitrogen discharge allocation rates (measured in kgN/ha/yr, in Overseer version 6.2.0) for each of these five land uses on a property. As new versions of Overseer are released, the reference files will be updated. If the new Overseer version results in a percentage change to a reference file's nitrogen loss, the same percentage change is applied to real blocks with the same land use i.e. real block nitrogen discharge allocation rates (Start Point, Managed Reduction Targets and 2032 Nitrogen Discharge Allocations) are all 'indexed' against the relevant reference file. The reference file method is explained in detail below:

Step 1: Create Overseer reference files

Overseer "reference files" have been established for a hypothetical dairy farm ("dairy farm reference file") and a hypothetical drystock farm ("drystock reference file"), and to represent the permitted activity nitrogen discharge level. The Overseer input parameters for these files and methodology are provided in *Methodology for and output from further revision of NDA reference files, December 2016* prepared by Perrin Ag Consultants Ltd. In summary, each pastoral reference file is based on:

- A simplified and hypothetical 100 ha farm.
- The same structure as typical nutrient benchmarking files, inputs the represent average nutrient benchmarked inputs, and predicted nitrogen losses in line with average discharges for the sector from the nutrient benchmarking period.

In addition to the two pastoral reference files, it is also necessary to define a reference file for plantation forestry (typically *Pinus radiata*), due to potential changes in how Overseer models forestry nitrogen losses (e.g. by Overseer linking to the NuBalM model under development by Scion). To ensure consistency with the suite of reference files for dairy, drystock and forestry, it is necessary to have comparable reference files for

bush/scrub, and house blocks. Together, these land uses constitute the major land uses underpinning the Nitrogen Discharge Allocation method.

The reference file parameters for plantation forestry, bush/scrub and house blocks are described in Table LR 7 below:

Table LR 7 Reference file inputs for plantation forestry, bush/scrub and house blocks

Reference file land use	Input Parameters	Nitrogen loss in Overseer version 6.2.0
Plantation forestry	1000 hectare pine block; 45 km from coast (prevailing NE wind); 1663 mm catchment average annual rainfall (catchment average for nutrient benchmarked land in plantation forestry 2001-04)	2.5 kgN/ha/yr
Bush/scrub	1000 hectare native block; 45 km from coast (prevailing NE wind); 1836 mm catchment average annual rainfall (catchment average for nutrient benchmarked land in plantation forestry 2001-04)	3.0 kgN/ha/yr
House block	2.1 hectare property comprising two blocks A and B. Block A: 2.0 hectare house block with 1755mm annual rainfall and 45 km from coast, 10 standard houses on conventional septic tanks: 30 people, 5% cultivated garden area. Block B: 0.1 hectare trees and scrub block, 1800 mm annual rainfall and 45 km from coast, and native bush type. The nitrogen loss from Block B is ignored as its inclusion is a work-around to enable the file to run i.e. Overseer will not run if the only block is a house block.	78 kgN/ha/yr or 15.6 kgN/house/yr

Step 2: Calculate property/farming enterprise's targets in relation to the reference files

Each property/farming enterprise's nitrogen targets (Start Point, Managed Reduction Targets for 2022 and 2027, and 2032 Nitrogen Discharge Allocation will be calculated as set out in A, B and C below.

A. Setting nitrogen loss targets in Overseer version 6.2.0 and as percentages of reference files

1. The property's land use and 2017 start point are described in accordance with its 2001-2004 land uses and nitrogen losses, consistent with its 2001-2004 nutrient benchmark, being an actual RL R3 (Rule 11B) - RL R6 (Rule 11 E) nutrient benchmark value or a derived nutrient benchmark value in accordance with Schedule LR One.
2. The 2032 Nitrogen Discharge Allocation is calculated in accordance with Schedule LR One using Overseer version 6.2.0.
3. The reduction increments for the five year periods (corresponding to managed reduction) are as described in Schedule LR One and show the total reduction required over the 15 year period from 2017 to 2032, unless otherwise prescribed in a Nutrient Management Plan and resource consent conditions.
4. The reference file nitrogen loss rates are calculated using Overseer version 6.2.0, using the file input parameters in *Methodology for and output from further revision of NDA reference files, December 2016* prepared by Perrin Ag Consultants Ltd.
5. The target nitrogen loss rates (Start Point, Managed Reduction Targets for 2022 and 2027, and 2032 Nitrogen Discharge Allocation are then expressed as a percentage of the relevant reference file nitrogen loss rate.
6. The relevant land uses and areas, and Nitrogen Discharge Allocation and Managed Reduction Targets as percentages of reference files will be included within consent conditions.

B. Using reference files with subsequent Overseer versions and maintaining the methodology

7. The objective of the reference files is to closely track the average nutrient benchmarked loss for each sector in each version and the reference files will be maintained to achieve this. The reference files for the major land uses are rerun upon each new Overseer version release, using the file input parameters provided in *Methodology for and output from further revision of NDA reference files, December 2016* prepared by Perrin Ag Consultants Ltd with the nitrogen loss results (in kgN/ha/yr) to provide an updated output. The nitrogen loss results (in kgN/ha/yr) will be made publicly available by the Regional Council. This will include a statement of any minor adjustments to the reference file input data necessary to maintain the detailed functionality of the reference files.

8. Where an Overseer version change causes any reference file to malfunction, produce scientifically implausible nitrogen loss results, or includes a known error the reference file methodology will be amended on the basis of the following principles and considerations:

   (a) Any changes to the reference files shall be the minimum required to maintain their integrity and functionality;

   (b) The amended methodology will be consistent with technical information published by Overseer Ltd;

   (c) The reference file shall be structured to ensure consistency with current Overseer data entry practice for the Lake Rotorua groundwater catchment;

   (d) The reference file behavior should not be inconsistent with current Lake Rotorua groundwater catchment farm files;

   (e) Any amendments will be independently certified by agricultural advisors with experience of the Lake Rotorua groundwater catchment and will align with changes to published Overseer user guides;

   (f) The amended methodology and independent certification will be published and made available by the Regional Council.

C. Use of updated reference files

9. A property's nitrogen targets are reassessed by applying the property's relevant reference file percentage rates (from 6. above) to the updated reference file nitrogen loss rates. This reassessment shall be carried out when any of the following occurs:

   (g) Upon updating the Nutrient Management Plan at the standard five-year interval;

   (h) When the Nutrient Management Plan needs to be updated to reflect actual or proposed changes in the property's nitrogen management, including any transfer of Nitrogen Discharge Allocation or Managed Reduction Offset;

   (i) Upon request for a reassessment.

Overseer descriptions used to define sectors

Overseer descriptions relate to definitions in the following ways:[68]

Drystock areas are Overseer pastoral block types where the land use is not dairy, and cut and carry, crop and fruit crop.

Dairy areas are Overseer pastoral blocks or fodder blocks that are primarily used for dairy.

Bush/scrub areas are Overseer native blocks.

Plantation forestry areas are Overseer forestry blocks.

[68] Overseer Technical Manual: Technical Manual for the description of the Overseer Nutrient Budgets Engine, April 2015.

Schedule LR Six – Nutrient Management Plan requirements

The aim of the Nutrient Management Plan is to manage nutrient reduction so the property/farming enterprise meets the Nitrogen Discharge Allocation by 2032.

A Nutrient Management Plan shall be prepared in accordance with A to D below by a suitably qualified and experienced person.

The Nutrient Management Plan shall take into account sources of nitrogen and phosphorus associated with the farming activity and identify relevant nitrogen and phosphorus management practices and mitigation measures.

Nutrient Management Plans are the primary point of monitoring and if necessary compliance, particularly the mitigation actions, described land uses and Overseer input parameters specified in the Nutrient Management Plan. These provide a point of comparison so that monitoring of resource consents issued under the land use activity rules can ensure that Managed Reduction Targets and Nitrogen Discharge Allocations are being met.

The plan requirements will apply to:

A. A Nutrient Management Plan prepared for an individual property or farm enterprise; or

B. A Nutrient Management Plan prepared for an individual property which is part of a farming enterprise or a collective of pastoral properties.

C. Nutrient Management Plans prepared for an individual property or a farming enterprise as part of an industry environment management programme approved by the Bay of Plenty Regional Council.

D. Nutrient Management Plans prepared for an individual property or a farming enterprise that are not derived from an industry environment management programme.

Nutrient Management Plans shall contain as a minimum:

1. Property details:
   (a) Physical address;
   (b) Name of a contact person;
   (c) Description of ownership structure;
   (d) Legal description of the land and farm identifier as provided by Regional Council;
   (e) Name and contact details of the person responsible for managing the property/farming enterprise if different from above.

2. A map(s) or aerial photograph at a scale that clearly shows:
   (a) The boundaries of the property;
   (b) A block map for the property/farming enterprise.

3. The start point on which nitrogen loss allocation is based, relevant Managed Reduction Targets and the Nitrogen Discharge Allocation allocated to the property/farming enterprise that must be achieved by 2032.

4. Any nutrient benchmark under RL R3 – RL R6 (Rule 11B – Rule 11E) of the Regional Natural Resources Plan.

5. A description of how each of the following management objectives, where relevant, will be met.

   (a) *Nitrogen management:* To manage nitrogen losses to achieve the Nitrogen Discharge Allowance allocated to the property/farming enterprise by 2032. The Nutrient Management Plan must include:

(i) A nutrient budgeting file for the property/farming enterprise that matches the current system or use of the system.

(ii) A pathway, including a schedule of mitigation actions, described land uses and Overseer (or other model) input parameters, that demonstrates managed reduction to achieve the next Managed Reduction Target in accordance with Schedule LR One and LR P6. Identified actions shall include good management practices (including those assumed by the model being used) where available.

(iii) Subject to 7, a description of any mitigations or farming system components that are not included in Overseer or proxies used to represent those mitigations or farming system components within Overseer.

(iv) A pathway demonstrating potential mitigation actions and/or adaptive management options to achieve future Managed Reduction Targets and the 2032 Nitrogen Discharge Allocation in accordance with Schedule LR One and LR P6.

(v) The specific data and records that will be kept to measure compliance with specific targets and mitigation actions defined in 5.(a)(ii).

(vi) A description of any specific risks related to nitrogen leaching and runoff risks and how these will be addressed.

(b) *Phosphorus management:* To identify the environmental risks associated with phosphorus and sediment loss from the subject property, the significance of those risks and implementation of good management practices to minimise the risks from critical source areas and other areas which may contribute to phosphorus losses.

(c) *Effluent management:* To manage the risks associated with the operation of effluent systems to ensure effluent systems are compliant with either an approved resource consent or permitted activity standards of the regional plan every day of the year.

(d) *Gorse management:* To manage gorse to minimise the risk of nitrogen losses.

(e) *Water irrigation management:* To operate water irrigation systems in a way that minimises the risk of nitrogen losses from the property.

(f) *Fertiliser management:* To manage the risks associated with the application of fertiliser. Fertiliser must be applied in accordance with the Code of Practice for Nutrient Management 2013 or as updated; and either -

(i) the Spreadmark Code of Practice 2015 or as updated; or

(ii) With spreading equipment that is maintained and self-calibrated to Spreadmark Code of Practice standards.

6. Nutrient budgeting files must be prepared using the Overseer Nutrient Budget model or an alternative nutrient budgeting model authorised by the Regional Council in accordance with LR P14 and LR P15. The Overseer file or alternative nutrient budgeting file that describes the farm system for the period of the Nutrient Management Plan must be provided to Regional Council.

7. Any mitigations or farming system components to be used within a Nutrient Management Plan, that Overseer is not suitable for modelling, or proxies or methods used to represent those mitigations or farming system components for modelling, must be pre-authorised by the Regional Council. The Regional Council may seek expert verification of the supporting material, including evidence demonstrating managed reduction, implementation practices and ongoing monitoring, provided as part of the authorisation process. Authorisations will be based on the Regional Council's assessment of evidence provided in support of the proposal and may be limited by location, duration and method of application.

8. Nutrient Management Plans shall be updated:

(a) at no more than five yearly intervals from 1 June 2017; and

(b) in response to a significant farm system change; or

(c) in response to the addition or removal of leased land or land with contractual arrangements in support of a property/farming enterprise; or

(d) on the transfer of Nitrogen Discharge Allowances; or

(e) on the transfer of Managed Reduction Offsets to meet a Managed Reduction Target; or

(f) by agreement with the Chief Executive of the Regional Council.

All updated Nutrient Management Plans must meet the intent of the original Nutrient Management Plan and include an updated nutrient budgeting file.

The information requested by the Bay of Plenty Regional Council shall be provided in an electronic format compatible with Regional Council information systems and may include but shall not be limited to the following reports from Overseer or their equivalent if an alternative nutrient budgeting model is used: Nutrient Budget, Nitrogen Summary, and Nitrogen Overview.

Schedule LR Seven – Transfer of Nitrogen Discharge Allocation or Managed Reduction Offset

Transfer of Nitrogen Discharge Allocation

The transfer of Nitrogen Discharge Allocation between properties/farming enterprises can enable a destination property/farming enterprise to increase its Nitrogen Discharge Allocation:

- Any proposed increase in nitrogen loss (consequently triggering the need for a new Nitrogen Discharge Allocation) associated with land must be offset by a corresponding and equivalent decrease in nitrogen loss (also triggering the need for a new Nitrogen Discharge Allocation on one or more other properties/farming enterprises in the Lake Rotorua groundwater catchment.
- Any Nitrogen Discharge Allocation that is transferred between properties/farming enterprises (for example by sale or lease) must be authorised by the Regional Council to confirm the new source (transferor) Nitrogen Discharge Allocation and new destination (transferee) Nitrogen Discharge Allocation.
- Evidence will be required of the legal basis (i.e. a legally binding agreement between parties) for how the Nitrogen Discharge Allocation transfer is secured.
- New Nutrient Management Plans will be required to recognise the new Nitrogen Discharge Allocation and any new Managed Reduction Targets for the source and destination land, except where the source land is in plantation forestry in which case no source land Nutrient Management Plan is required.
- These rules do not regulate the acquisition of Nitrogen Discharge Allocations by any person or organisation for the removal from the system or for offsetting purposes, 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 measureable and able to be delivered through mitigation actions within Nutrient Management Plans.
- Evidence will be required of the legal basis for how the Managed Reduction Offsets are secured for the relevant timeframe.
- New Nutrient 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 Allocations target.
- The use of Managed Reduction Offsets by the destination property/farming enterprise is limited by the Managed Reduction Target timeframes for the source property/farming enterprise. Managed Reduction Offsets only last for a maximum of five years.