Lake Rotorua Incentives Scheme Policy

October 2013

Introduction

Purpose and scope

This document provides a high level framework for administering the Lake Rotorua Incentives Scheme. As the scheme involves the distribution of public funds for private use, all parties need certainty that the funding is distributed fairly, and used efficiently for the intended purpose.

The Lake Rotorua Incentives Scheme Policy (the Policy) sets out the direction for how the incentives scheme will be run. This includes mechanisms for implementing the scheme and guidance for selecting funding recipients and principles for how decisions will be made.

The Policy also contains some design aspects of the scheme such as criteria, exclusions, and conditions of funding. These are at a high level and will be developed into more detail at the next stage.

The Policy concerns only the distribution of incentives funding. Therefore it does not cover the details of how nutrient allocation operates such as rules, the range of nitrogen discharge allowance, resource consent conditions, or the contents of Nutrient Management Plans etc. These details will be developed separately.

The Incentives Scheme totals $45.5 million. As set out in the document, this has been split into two funding streams:

- Rules Programme – $5.5 million 'above the line'.
- Incentives Programme – $40 million 'below the line'.

This policy covers both funding streams. The design and implementation details for each funding stream will be developed based on the policy.

A separate, but aligned, Gorse Programme will be administered under a separate policy and funding structure, and is not included in this policy.

Document structure

This document is separated into two sections.

Section One provides the background to the problem, and the key policy decisions that have been made to date to address the problem.

Section Two sets out the policy for administering the Lake Rotorua Incentives Scheme. This includes a high level approach and principles, and criteria and conditions of funding.

Section 1 – Background

Problem definition

A water quality target for Lake Rotorua has been set in the Regional Water and Land Plan. This target is a Trophic Level Index (TLI) of 4.2, based on community consultation and a desire for the level of water quality enjoyed in the 1960s. The target has been endorsed by all partners of the Rotorua Te Arawa Lakes Strategy Group.

The Lake Water Quality Technical Advisory Group has confirmed that to reach the target TLI of 4.2, no more than 435 tonnes of nitrogen should enter Lake Rotorua each year. This target has been included in the Proposed Bay of Plenty Regional Policy Statement (RPS).

Modelling undertaken by the National Institute of Water and Atmospheric Research (NIWA) in February and April 2011, using the Rotorua and Taupō Nitrogen (ROTAN) model, indicates that the current nitrogen input to the lake from the catchment is approximately 755 tonnes/year[1]. This means the nitrogen entering Lake Rotorua from the catchment needs to be reduced by approximately 320 tonnes/year.

It is estimated that 50 tonnes can be achieved through engineering solutions, leaving 270 tonnes that can only be achieved from a reduction in nitrogen loss from pastoral land use.

The current estimated loss of nitrogen from pastoral land is 526 tonnes/year. In order to achieve the 270 tonne/year reduction, total pastoral loss must be reduced (by half) from its current loss of 526 tonnes/year to 256 tonnes/year.

Regional Policy Statement

The Proposed Regional Policy Statement (RPS) provides specific policies for the management of nitrogen in the Lake Rotorua catchment:

- Policy WL 3B – the total amount of nitrogen that enters Lake Rotorua shall not exceed 435 tonnes per annum.
- Policy WL 5B – allocate the 435 tonne limit amongst land use activities.
- Policy WL 6B – no discharges shall be authorised beyond 2032 that result in the 435 tonne limit being exceeded. An intermediate catchment-wide target is to be set to achieve 70% of the required reduction by 2022.

The amount of nitrogen currently discharging to the lake is approximately 755 tonnes/year. To achieve the 435 tonnes/year limit, a 320 tonne/year catchment wide reduction is required.

Pastoral land use within the sustainable limit

Table 1 identifies the sources of nitrogen entering Lake Rotorua from the catchment. Almost 70% of the catchment nitrogen load comes from pastoral land use activities. Therefore a significant proportion of the 320 tonne/year reduction will need to be from changes in the pastoral farming sector.

Not all nitrogen losses from the catchment can be reduced. Nitrogen that comes from rainfall on the lake cannot be managed or reduced. Losses from forest and bush are also considered to be 'unmanageable' because they are a relatively natural state and cannot be reduced any further.

[1] *The ROTAN modelling done in 2011 is considered to be the best available information at this stage. Staff and the Stakeholder Advisory Group have agreed to use this information in developing the rules and incentives package. It is noted that the Proposed Regional Policy Statement refers to a current input of 746 tN/yr, derived from the 2009 Lake Rotorua and Rotoiti Action Plan.*

Table 1: Sources of nitrogen entering Lake Rotorua from the catchment[2].

Source of nitrogen	Area in use (ha)	% of total catchment	Total tN/yr (in 2010)	% of total N	Average kg N ha/yr
Dairy	5050	10.9	273	36.2	54.1
Drystock[3]	15072	32.5	236	31.3	15.7
Forest	21182	45.7	75.4	10.0	3.6
Urban[4]	3961	8.5	93.4	12.4	23.6
Lifestyle	1053	2.3	16.7	2.2	15.9
Geothermal	59	0.1	30.3	4.0	513.6
Rain	n/a		30	4.0	
TOTAL	**46377**	**100**	**755**	**100**	**16.3**

Significant effort has already been made to reduce nitrogen from urban sources. For example, upgrading Rotorua's Wastewater Treatment Plant and installing and upgrading the Land Treatment system has cost $60 million since 1990. This has prevented between up to 290 (current) tonnes of nitrogen reaching Lake Rotorua each year.

Further engineering interventions to reduce nitrogen from some sources have also been planned for the next ten years. These sources include:

- *Geothermal sources*: interventions are underway to remove nitrogen that enters the lake from geothermal sources by treating the Tikitere geothermal springs. This is predicted to achieve a 30 tN/yr reduction.
- *Urban sources:* A further reduction of 20 tN/yr from urban sources is planned from sewage reticulation/upgrades and stormwater treatment.

Given the unmanageable loads identified, as well as the 50 tonnes of reductions from engineering interventions already planned, further reductions to achieve the sustainable limit will need to come from pastoral activities.

Therefore the nitrogen available to be allocated to pastoral land use activities is provided at Table 2.

[2] Nitrogen figures are based on the most up to date ROTAN modelling work done in April 2011
[3] Including sheep, beef, horticulture and cropping
[4] Including urban (25.5t), urban open space (8t), septic tanks (26.2) and sewage treatment (33.7t)

Table 2: Nitrogen available to be allocated to pastoral land use activities

Source of nitrogen	Current nitrogen input (tN/yr)	Proposed distribution of the sustainable limit
Pastoral land use (dairy, drystock, lifestyle)	526	256
Other (urban, sewage, geothermal, rain, forest	229	179
TOTAL	**755**	**435**

This means that for pastoral land use, the amount of nitrogen discharge allowances that can be allocated will need to be more than halved (a 270 tN/yr or 51% required reduction), from the current loss of 526tN/yr to 256tN/yr.

This is not about allocating nitrogen to sources such as forest, urban and sewage and geothermal. There is a risk that inputs associated with these sources may change over time. For example urban losses may increase if the Rotorua population grows, and reductions from geothermal inputs are not guaranteed. These risks will need to be dealt with separately, as they arise, through the Rotorua Te Arawa Lakes Programme.

Despite the timeframes specified in the Proposed RPS for achieving the sustainable limit, nutrients from the catchment will take a long time to travel through groundwater to the lake. Changes in the way land is used could take many years before they are effective in decreasing nutrient loads to the lake. For example, ROTAN results indicate that once nitrogen losses are reduced by 320 tN/yr it will take 35 years for the lake to be within 10-15% of the sustainable limit. However, it may take up to 100 years for the lake load to fully adjust and reach the sustainable limit as a 'steady state'.

Lake Rotorua Catchment Stakeholder Advisory Group

The Regional Council directed staff to actively engage with stakeholders throughout development of the rules and incentives. As a result, the Lake Rotorua Catchment Stakeholder Advisory Group was established in September 2012. This Group is known as StAG.

The main purpose of the Group is to provide oversight, advice and recommendations on "rules and incentives" options that will achieve the nitrogen reduction targets needed from pastoral land to meet Lake Rotorua's water quality target. This includes advice on implementation options and District and Regional statutory plans.

The Group includes members from the Lake Rotorua Primary Producers Collective, Lakes Water Quality Society, Bay of Plenty Regional Council, Rotorua District Council, Te Arawa Lakes Trust, Office of the Maori Trustee, forestry sector, iwi landowners and small block owners.

The Group first convened in November 2012 and have met every month since. They have been involved in the development of policy on allocating nitrogen allowances, considering options and the information available. The Group was also involved in developing this Incentives Scheme Policy.

Incentives Funding

Deed of Funding

In March 2008, Central Government agreed to contribute $72.1 million over 10 years to implement actions to improve water quality in the four priority Rotorua Te Arawa lakes (lakes Rotorua, Rotoiti, Rotoehu and Ōkāreka). The Deed of Funding was developed and signed between the Crown, the Bay of Plenty Regional Council, and Rotorua District Council.

The Deed was prescriptive, favouring existing interventions and preventing flexibility of actions arising from development and research. In July 2011, Cabinet agreed to a more flexible funding arrangement that enabled the Rotorua Te Arawa Lakes Programme to adopt a more adaptive management approach. This meant that Crown funds could be used for more efficient interventions than those identified at the time of the Deed's signing in 2008.

Two interventions set out in the original Deed were, sediment capping of lakes Rotorua and Rotoiti, and the Hamurana diversion wall. These interventions are no longer ideal for several reasons:

- Controversial – the diversion wall in particular is likely to generate opposition from the community which would lead to delays and increased costs for consenting with no guarantee of a favourable outcome.
- Limited long-term effectiveness – sediment capping is only effective for four years. To remain effective, the process would need to be repeated every few years making this intervention costly and inefficient. There is also an environmental risk associated with discharging chemicals into the lake on a regular basis. The long-term effects are still currently unknown.
- Short-term – both interventions treat the symptoms of the pollutants without addressing the source (nutrient discharges from land-use in the catchment).

A proposed change to the Deed would see the $8 million currently assigned to the Hamurana diversion wall, and $11 million currently allocated to sediment capping, reallocated to land use/land management change. Combined with funds from the Regional Council this provides a total of $45.5 million available to incentivise land use/land management change in the Lake Rotorua catchment.

Rules and Incentives Framework

The Rotorua Te Arawa Lakes Programme and the Stakeholders Advisory Group (StAG) have worked closely together to develop a framework for achieving the 270 tonne reduction. On 17 September 2013, the Regional Council made a decision on a framework to achieve the required reduction from pastoral land use. This framework splits the 270 tonnes into three areas of responsibility:

- Rules Programme – pastoral farmers to achieve a total reduction of 140 tonnes of nitrogen by 2032 by meeting a nitrogen discharge allowance (NDA) allocated to each farm.
- Incentives Programme – the Regional Council to remove 100 tonnes of nitrogen through an Incentives Scheme to encourage land use/land management change.
- Gorse Programme – the Regional Council to remove 30 tonnes of nitrogen through gorse control. This project will be funded and implemented separately.

This framework was endorsed by the Rotorua Te Arawa Lakes Strategy Group on 27 September.

Rules Programme

Under the Rules Programme, the landowners are responsible for achieving a total reduction of 140 tonnes of nitrogen across the catchment. Each farm will be allocated a Nitrogen Discharge Allowance (NDA) of, on average, 35 kgN/ha for dairy or, on average, 13 kgN/ha for drystock. The NDA ranges are yet to be determined but will take into account the geophysical and farm system characteristics of each farm. Landowners have until 2032 to reach their NDA.

A total of $5.5 million is available to assist farmers with 'above the line' reductions to get to their NDAs. Although this funding assists with achieving the goals of the rules programme, it will be administered as a part of the incentives programme. This will ensure that all funding is administered consistently and fairly.

Each farm will be required to have a Farm Nutrient Plan in place by 2015. These plans will set out a practical pathway for staged nutrient reductions that will achieve the NDA by 2032. The Farm Nutrient Plan will then be a consent condition in resource consents issued for each farm by 2017. Rules will be introduced into the Regional Water and Land Plan (RWLP) to provide the regulatory framework for this programme.

Incentives Programme

The Incentives Programme is focussed on encouraging permanent reductions in nitrogen discharge by 100 tonnes from 'below the line'. That is, these changes are in addition to reductions required of land owners to achieve the NDA. A total of $40 million is available to incentivise changes below the NDA.

The $5.5 million available to assist farmers with 'above the line' reductions to achieve the goal of the rules programme will be administered alongside the funding for the incentives programme.

Gorse Programme

A total of 870 hectares of land is currently covered with well-established gorse. This 'old man gorse' has the potential to leach 38 kgN/ha/year. A Gorse Programme funded and implemented separately from the Rules and Incentives Programme will aim to remove 30 tonnes of nitrogen from the lake catchment.

The programme will be funded and administered separately and is not included in the Incentives Scheme Framework.

Summary of Allocation Framework

Table 3 and Figure 1 summarise the targets, responsibilities, and timeframes for the allocation framework.

Table 3: Summary of allocation framework

Rules Programme – 140 tonne reduction		
By 2015	Farm nutrient plans	Plans will be put in place for every farm, setting out a practical pathway of staged nutrient reductions
By 2017	Resource consents	Farms will be consented, with nutrient reduction plans as a consent condition
By 2032	Nitrogen Discharge Allowances Funding	Average of 35 kgN/ha for dairy and 13 kgN/ha for drystock, with adjustments made for geophysical and farm system characteristics $5.5m of funding provided to get to the NDAs
Incentives Programme – 100 tonne reduction		
By 2022	Incentives fund	$40m “below the line” to remove 100 tonnes of N
Gorse Programme – 30 tonne reduction		
By 2022	Gorse fund	Separate funding to remove 30 tonnes of N from gorse

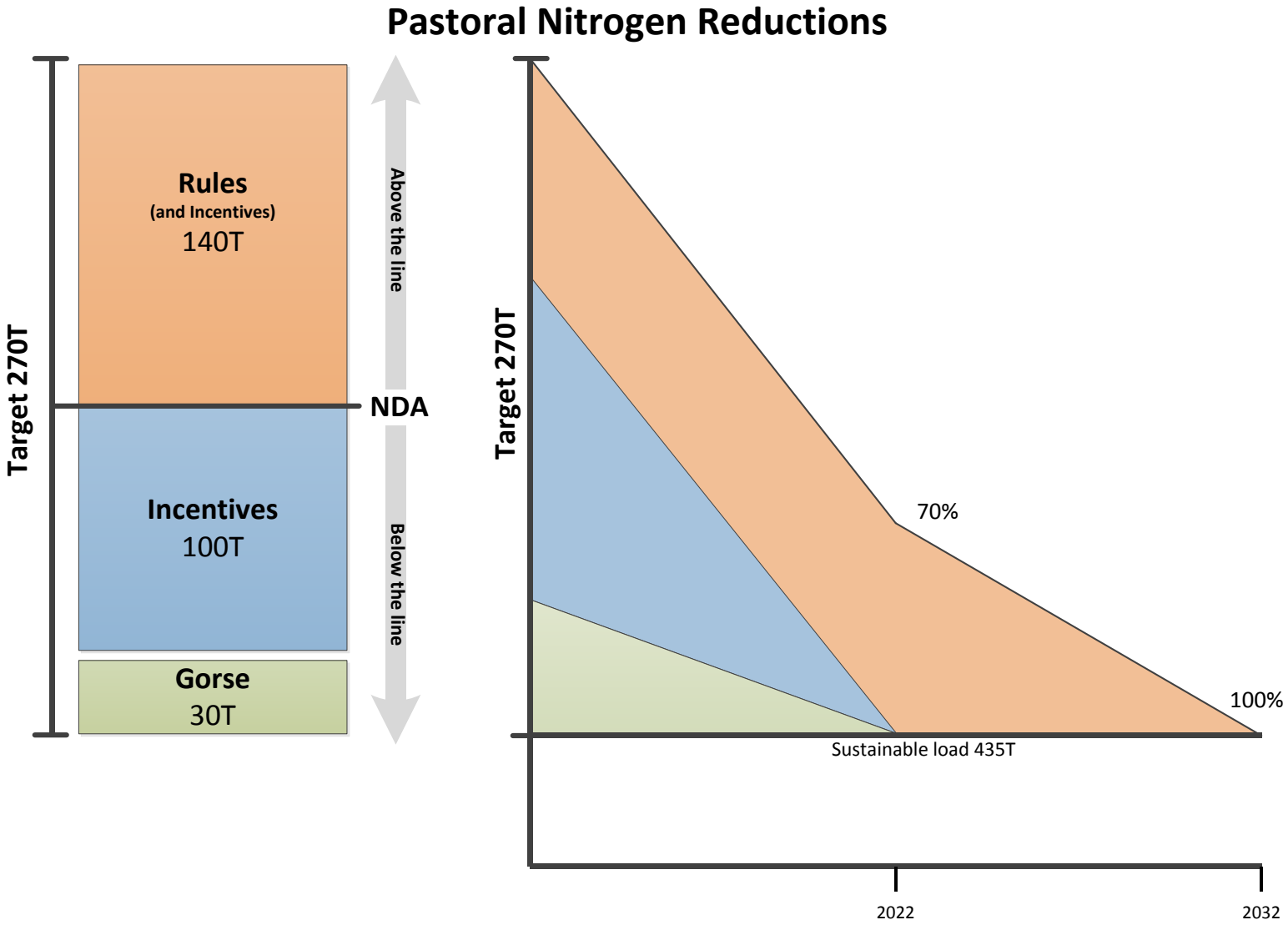

Figure 1: Pastoral Nitrogen Reductions

Section 2 – Incentive Scheme Policy

Aim

The aim of the Incentives Programme is to:

- Provide financial assistance *above the line* to assist pastoral farmers to meet their NDAs (up to $5.5 million); and
- Incentivise land use change and land management change *below the line* to reduce the nitrogen discharge to the lake by 100 tN/year (up to $40 million).

Approach

The approach sets out high-level mechanisms for running the scheme – ensuring fairness, transparency, and adaptability are built into the framework from the beginning. This approach is standard practice when providing public funds for private use.

The Incentive Scheme will be run according to the following approach:

1 An open and transparent process – information will be readily available about how proposals will be assessed and decisions made.

Reason – This is consistent with standard Council procedures and good practice for any project where public money is being provided to private landowners.

2 Fair access – the Incentives will be open to all landowners who are likely to be affected by nutrient reduction rules, there will be equal opportunities to apply for funding.

Reason – Ensures that any landowner is eligible to apply for funding, regardless of any other factor (e.g. income).

3 Well governed – there will be clear governance structures and accountability for impartial decision-making.

Reason – When allocating public money, the public need to trust that decisions are made without bias, by parties with no financial interest in the outcome.

4 Based on efficient administration – we will use existing systems and resources where possible to ensure funding is used for the purpose intended.

Reason – With limited funds available, it makes good business sense to ensure that administration costs are kept to a minimum to achieve the best impact per dollar spent.

5 Responsive to opportunities – within the boundaries of the agreed process, we will remain open to new approaches and opportunities as they emerge.

Reason – The scheme is set to run over a long timeframe. Innovation and advances in technology over this time, may lead to unanticipated opportunities.

6 Market based – Scheme mechanisms will encourage competition to drive efficiencies in nitrogen reductions.

Reason – a competitive market ensures that the price of nitrogen is appropriate and fair.

Principles of Funding Allocation

The principles are intended to give guidance to selecting funding recipients. They are not intended to be used as a checklist of requirements that must be met before the application will be considered.

In no particular order, when selecting funding recipients we will favour:

- The most nitrogen reduction per dollar – we will pay a fair value for nitrogen.

  Reason – This principle promotes efficiency – a basic requirement for the distribution of public funds. We also have limited funds available to achieve an ambitious target, so the best price for nitrogen will help to ensure we achieve the necessary reductions.

- Proposals that maximise benefits and minimise consequences.

  Reason – Promotes the selection of solutions that maximise benefits beyond simply reducing nitrogen and minimising other impacts. The most efficient actions (in terms of the most nitrogen for the least cost) may have other unintended consequences to the community.

- Actions that commit to significant land-use/management change and/or achieve significant reductions of nitrogen.

  Reason – Although administration costs will be kept as low as possible, there is still an administrative burden associated with processing applications and distributing funding. Therefore the magnitude of the change being funded needs to be significant enough to justify these administration costs.

High-level Criteria for Funding Allocation

1 Only actions with a high degree of certainty of nutrient reduction will be funded.

  Reason – As we have to measure progress and are accountable for reaching catchment targets, we need to be as close to certain as possible that proposed interventions will be successful in achieving specific reductions.

2 Funding below the line will only be provided for actions demonstrated to achieve reductions below the NDA for the property.

  Reason – Funding to achieve the NDA classifies as above the line.

3 Landowners must be compliant with Regional Water and Land Plan Rules.

  Reason – any landowner in breach of the Regional Water and Land Plan should not receive public funding until they are fully compliant.

Exclusions

Funding will not be provided for:

1 Any nutrient reduction actions that are considered part of good farming practice.

  Reason – Farms should already be operating at good practice or should be able to move to good practice.

2 Gorse control.

  Reason – Gorse control is being addressed by a separate project with separate funding.

3 Nutrient reduction activities that are cost neutral to do or that are financially positive.

  Reason – Public funds should not support actions that are part of standard business improvement for farms.

Conditions of Funding

1 Evidence that reductions are certain, quantifiable and measurable.

Reason – The Regional Council needs quantitative evidence to establish that the reductions have occurred or will occur as a result of the action that is being funded e.g. Overseer®.

2 All reductions must occur in perpetuity.

Reason – Central Government and the Regional Council need to be assured that the problem is solved permanently (given the significant financial contribution from public funding), and that the issue will not resurface as a burden for the next generation.

3 The Regional Council will use legal mechanisms to enforce reductions as appropriate.

Reason – the Regional Council needs a legal mechanism (e.g. caveats, contracts) to enforce any breach of conditions that means the required reduction (as funded by the public) is achieved.

4 Funding recipients and/or their service providers, will be contracted and paid funding when work is completed or at agreed milestones.

Reason – Provides certainty to all parties that the funding will be distributed, and that it is being used for the intended purpose.

5 All limits, targets, NDAs, and modelling software versions will be identified and set at the time of legal binding.

Reason – Provides certainty to all parties that the required nutrient reductions will not change for the duration of the Programme.