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**Report To:** Regional Direction and Delivery Committee

Meeting Date: 09 December 2014

**Report From:** Sarah Omundsen, Programme Leader (Water Policy)

# Feedback on rules to manage nitrogen loss in the Lake Rotorua catchment

## **Executive Summary**

The first phase of public consultation on rules to manage nitrogen loss in the Lake Rotorua catchment is now complete. The community was highly engaged in this process with high attendances at the public information sessions/open days and sector meetings. Over 330 feedback forms, emails or letters were received from the general public, sector organisations, large land block representatives and Māori landowners. Although there was general agreement that the community wanted a clean lake, opposition to the rules as a means to deliver the lake's sustainable target was overwhelming.

This report presents a summary of the feedback received and possible ways to respond to this feedback through the rule structure. The recommendations reaffirm rules as an integral component of the Integrated Framework as proposed by the Stakeholder Advisory Group and agreed to by Rotorua Te Arawa Lakes Programme partners in September 2013.

Key changes in the rule structure proposed in this report include a change in the permitted threshold to properties under 10 hectares (excluding specified intensive land uses) and a delay of regulatory requirements for properties sized between 10-40 hectares until 2022.

The section 32 evaluation report is being prepared concurrently with rules drafting and aims to reflect community feedback and Regional Council direction. A lot of feedback was received around the availability and timing of the section 32 evaluation report. This is a key document that brings together all of the information and decisions made through the iterative policy process and assesses the range of risks, costs and benefits of introducing the new rules. Staff propose that Regional Council receive the section 32 evaluation report in March 2015 and delay rule notification until May 2015 to allow Regional Council and Partners to feedback on the costs, benefits and risks of the new rules.

#### Recommendations

That the Regional Direction and Delivery Committee under its delegated authority:

- 1 Receives the report, Feedback on rules to manage nitrogen loss in the Lake Rotorua catchment.
- 2 Receives the summary of feedback provided during consultation (Appendix 1) and the full list of individuals that provided feedback (Appendix 2).
- 3 Approves all recommendations in this report (recommendation a) through to recommendation k) as listed in section 3).
- 4 Notes that this report will be provided to the Rotorua Te Arawa Lakes Strategy Group for endorsement of the recommendations at their 10 December 2014 meeting.
- Confirms that the decision is within the Bay of Plenty Regional Council's strategic planning framework (Council's Ten Year Plan, and planning documents and processes under the Resource Management Act 1991, Biosecurity Act 1993, Land Transport Management Act 2003, Civil Defence and Emergency Management Act 2002, and Local Government Acts 1974 and 2002).

# 2 Purpose

The purpose of this paper is to update the Committee on the draft rules consultation and seek decisions that support staff responses to the feedback received.

#### 3 List of recommendations

It is recommended that the Regional Direction and Delivery Committee:

- Agrees the most appropriate option for managing science uncertainty is to ensure that science and policy reviews and responses are included as a method in the plan change.
- b) Agrees that staff will provide Regional Council and Partners with the section 32 evaluation report in March 2015 and delay notification until May 2015 to allow feedback on the costs, benefits and risks of the new rules.
- c) Agrees to amend the permitted threshold to properties under 10ha (excluding specified intensive land uses) and delay regulatory requirements for properties between 10-40 ha until 2022.
- d) Reconfirms its expectations that individual Farm Nutrient Plans will show a pathway of managed reduction with specific targets at certain dates.

- e) Notes staff will seek a decision from Regional Council on the nitrogen allocation approach in February 2015, following the findings from the allocation workshop and economic modelling results.
- f) Agrees that all future communications tell the whole story of what is and has been done for Lake Rotorua to put the regulatory component in context.
- g) Adopts the statement:

The Integrated Framework places a responsibility on the Rotorua Te Arawa Lakes Programme (and the Regional Council as the lead organisation) to use its best endeavours to achieve a 130 tonne nitrogen reduction. The pastoral sector has a responsibility to achieve a 140 tonne nitrogen reduction (through responding to nutrient management rules) and the Programme will not seek to require more than this. The successful delivery of these responsibilities relies on all parties supporting all parts of the Integrated Framework.

- h) Approves the continued use of Overseer in the policy and rules for the Lake Rotorua catchment, guided by the recommendations of the report "Using Overseer within Rules for the Lake Rotorua Catchment".
- Notes staff will be responsive to outcomes of the Overseer national collaborative group, and will adapt where required as part of the five-year policy and science reviews.
- j) Agrees that the new rules will apply to the whole groundwater catchment, and where properties fall within Waikato Regional Council's jurisdiction staff will work with that Council to ensure the issue is addressed through their limit setting processes.
- k) Reconfirms a 20 year consent duration for controlled activities and a 5 year duration for restricted discretionary activities.

## 4 Background

#### 4.1 Regional Policy Statement direction

The Regional Policy Statement (RPS) provides specific direction for the management of nitrogen in the Lake Rotorua catchment as follows:

**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 nitrogen limit amongst land use activities

**Policy WL 6B**: Require, <u>including by way of rules</u>, the managed reduction of any nitrogen losses that are in excess of the 435 tonne limit by ensuring that:

No discharges shall be authorised beyond 2032 that results in the limit for Lake Rotorua being exceeded. A catchment intermediate target for the

managed reduction of nitrogen loss is to be set to achieve 70% of the required reduction from 746 t/yr to 435 t/yr by 2022.

The RPS also includes a directive method (Method 2) for giving effect to these policies that requires a change to the Regional Water and Land Plan.

The above polices became operative upon resolution of Federated Farmers Environment Court appeal in April 2013, which was a consequence of the "Oturoa Agreement<sup>2</sup>" negotiated earlier that year.

Regional Council has confirmed that rules will be required to give effect to the Regional Policy Statement<sup>3</sup>. Staff have also received legal advice that:

- The 435 tonne limit can be considered a definitive statutory requirement given it is set in the RPS and has been through the Resource Management Act process, including a section 32 assessment
- Council is justified in assessing options to achieve the 435 tonne limit, rather than assessing whether or not the limit itself is appropriate.

## 4.2 Developing rules to give effect to Regional Policy Statement direction

The best available science indicates that to achieve the 435 tonne limit, the total load of nitrogen from pastoral sources needs to be approximately halved. Given this scale of change, Regional Council directed that the development of rules must reflect active engagement with stakeholders<sup>4</sup>.

The Lake Rotorua Catchment Stakeholder Advisory Group (StAG) was established in 2012 to provide oversight, advice and recommendations on these new rules as well as incentives to achieve the nitrogen limit.

A key piece of work by StAG and staff is the proposed framework to deliver Lake Rotorua's sustainable nitrogen limit as an integrated programme of Nitrogen Discharge Allowances (NDAs), incentives and gorse conversion. In September 2013, Regional Council and Partners approved and endorsed this framework:

<sup>2</sup> In 2013, Bay of Plenty Regional Council, Federated Farmers Rotorua and the Primary Producers Collective signed the Oturoa agreement that identified the intent of all parties to meet the lake's sustainable load.

<sup>4</sup> Strategy Policy and Planning report, 31 July 2012, Process to deliver a package of rules and incentives for reaching Lake Rotorua's nitrogen limit.

<sup>&</sup>lt;sup>1</sup> 746 tonnes of nitrogen per year was based on the 2009 Draft Lake Rotorua and Rotoiti Action Plan. The rules and incentives process has referenced 755 tonnes of nitrogen per year as the steady state nitrogen load to the lake, based on the more recent 2011 ROTAN report.

<sup>&</sup>lt;sup>3</sup> Strategy Policy Planning Report, 3 August 2011, Developing Rules to Manage Nutrient Discharges.

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 nitrogen reductions.	
By 2017	Resource consents	Farms will be consented, with a Farm Nutrient Plan as a consent condition.	
By 2032	Nitrogen Discharge Allowances	Average of 35 kgN/ha/yr for dairy and 13 kgN/ha/yr for drystock, with adjustments made for geophysical and farm system characteristics.	
\$5.5m available to support meeting the requirements of the rules and to engage with the incentives fund.			
Incentives Programme – 100 tonne reduction			
By 2022	Incentives fund	\$40m "below the line" to remove 100 tonnes of nitrogen.	
Gorse Programme – 30 tonne reduction			
By 2022	Gorse fund	Separate funding to remove 30 tonnes of nitrogen from gorse.	

After September 2013, staff developed the following draft rule structure to be used as a basis for consultation with the wider community:

- 1. A sector-based range approach to allocating NDAs, noting that staff will seek feedback on alternative allocation options.
- 2. A rule hierarchy that includes:
  - (i) a permitted activity class for properties smaller than 40ha with nitrogen loss less than 10 kgN/ha/yr
  - (ii) a 20 year controlled activity consent for those showing managed reduction in a Farm Nutrient Plan (FNP)
  - (iii) an option for a five year restricted discretionary consent for those not demonstrating managed reduction.
- 3. FNPs will be a condition of consent and will require standard minimum information.
- 4. All properties larger than 2ha will have information reporting requirements to ensure compliance with either permitted activity status or resource consent conditions; and Regional Council will commit to monitoring permitted activities.

In May 2014, the Rotorua Te Arawa Lakes Strategy Group approved and endorsed the approach to develop rules to manage nitrogen loss in the Lake Rotorua catchment. The Regional Direction and Delivery Committee (RDD) approved the draft rule structure for consultation in June 2014.

#### 5 Consultation and feedback on draft rules

An intensive period of consultation was carried out between mid-July and the end of October 2014. The purpose of this consultation was to increase awareness

amongst the community about what the rules need to achieve and how the rules will impact landowners once they have effect.

The schedule for consultation included a number of public and Māori drop-in days, public information sessions/open days, hui and sector meetings. The consultation and engagement period was widely advertised through different mediums, including Facebook, radio and press adverts, emails and YouTube. Local, sector-specific and national media also covered the consultation through articles and news stories. Feedback was provided via different channels including telephone, in person, online and post or email. A range of supporting documentation was made available to the public.

Following feedback in the early stages of consultation some additional meetings were held focusing on the small landowner/lifestyle block sector and Māori landowners. In response to requests from iwi and the public for additional consultation time, the consultation deadline was extended from 14 October to 31 October 2014.

Over 330 feedback forms, emails or letters were completed by the general public, sector organisations, large land block representatives and Māori landowners. While many respondents noted that they supported the intent of the proposal to improve the water quality of Lake Rotorua, there were some recurring themes of concern identified by the feedback. Some of these concerns were clearly distressing for a number of respondents.

#### The main feedback included:

- There was much concern voiced that the draft rules, in general, give an unfair advantage to the highest nitrogen dischargers whilst placing restrictions on activities [perceived to be] not contributing to the problem.
- Many comments related to the importance of positively recognising and accounting for both land use capability and responsible environmental land management decisions.
- It was felt that those landowners who had been actively involved in retiring land, reducing nitrogen inputs, and other similar management approaches should be rewarded and that the proposal should promote incentives to replace high nitrogen emitting activities with low nitrogen emitting ones.
- Māori landowners were concerned that the suggested approach will result in inequity and effectively penalise them for their historically low contribution to the current levels of nitrogen. In particular, the suggested approach to allocate nitrogen was opposed in terms of fairness and equity as it was felt it contradicts the effects-based philosophy of the Resource Management Act 1991.
- More than three quarters of the respondents felt that the suggested consenting approach was not reasonable. There was unease about the lack of fairness, the costs and the lack of allowance for individual management

approaches. People generally had a preference for voluntary methods to reduce nitrogen.

- Nearly all the respondents had reservations with the consenting process proposed. It was felt that the proposal would have significant and detrimental impacts on Rotorua's economy, reducing property values and income levels.
- More than three quarters of the respondents did not support the suggested approach to allocate nitrogen based mainly on past land use. People felt that the low nitrogen dischargers would be subsidising the high nitrogen dischargers. In particular, it was noted that there is a huge farming variation within drystock that hasn't been allowed for. Suggested alternative methods included: purchase land; improve management information; different levels of allocations for lifestyle blocks; single fixed pastoral average; land use capability (natural capital); and promoting other forms of fertiliser.
- Over three quarters of the respondents did not believe the percentage reductions for dairy and drystock sectors proposed were reasonable. It was believed the approach would have a significant negative economic impact on the viability of Rotorua's economy.
- The vast majority of respondents believed that additional factors needed to be recognised in setting individual NDAs. This included offsetting land voluntarily retired before 2001, considering individual circumstances and including all aspects of farm management.

A detailed feedback report is included as Appendix 1 and a full list of individuals that provided feedback is included at Appendix 2.

# 6 Key themes of the feedback received

The key themes of the feedback received during the consultation period were:

- a) Science
- b) Social and economic impacts
- c) Managing small properties
- d) Timeframes, managed reduction and the 2022 target
- e) Nitrogen allocation
- f) Regulatory focus

An outline of the issue, what we heard, staff responses and recommendations for each of the key themes is provided below.

#### 6.1 Science

Issue

435 tonnes of nitrogen per year (tN/yr) is considered to be the "sustainable nitrogen limit" for the lake and is expected to meet a water quality objective set by the community based on the level of water quality experienced in the 1960s.

The science to support the sustainable nitrogen limit has been developed over a long period of time and from a range of experts. The sustainable nitrogen limit was first identified in 1986<sup>5</sup> and has been reassessed and reconfirmed since then<sup>6</sup>.

For more than ten years a Water Quality Technical Advisory Group has been in place. This Group provides technical advice on lake science and management to help reach the water quality targets for Lake Rotorua and other lakes.

The science behind what we know of Lake Rotorua is considered to be world class. However, as has previously been reported to Regional Council, there are some inherent assumptions and uncertainties in the science and information used to determine the trophic level index (TLI), sustainable limit, as well as current nitrogen inputs to the lake. These assumptions and uncertainties are outlined in Appendix 3.

#### What we heard

A common concern highlighted during the feedback period was the uncertainty around our science evidence to support the case for reducing nitrogen loss from farms. The types of questions that were asked include:

- Why are nitrogen reductions required when the TLI has already been reached?
- Why can't alum dosing be a part of a longer term management solution?
- Could different combinations of nitrogen / phosphorous reductions achieve the TLI?

#### Staff response

For the last three years Lake Rotorua has had improved water quality and has been at or very close to its TLI target. This has been achieved despite the current

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<sup>&</sup>lt;sup>5</sup> Rutherford, J.C., Pridmore, R.D., White, E. (1989), Management of phosphorus and nitrogen inputs to Lake Rotorua, New Zealand, Journal of Water Resources Planning & Management

<sup>&</sup>lt;sup>6</sup> Rutherford, K., (2003), Lake Rotorua Nutrient Load Targets, NIWA Client Report: HAM2003-155 and Rutherford, K. (2008), Nutrient load targets for Lake Rotorua - a revisit, NIWA Client Report: HAM2008-080.

nitrogen load being more than the sustainable limit of 435 tN/yr and a significant trend of increasing nitrogen in most major inflows to the lake<sup>7</sup>.

The reasons for the water quality improvements are outlined in the consultation fact sheet on science included at Appendix 4. Work is also underway to better understand the range of nitrogen and phosphorous loads that in combination with certain levels of alum control can deliver a TLI of 4.2. A report on this work will be finalised shortly.

The Water Quality Technical Advisory Group advice remains that to achieve a long-term TLI of 4.2, no more than 435 tonnes of nitrogen and 37 tonnes of phosphorus should enter Lake Rotorua each year.

While our current science base is the best information available, it is critical that science and modelling is continually updated to ensure nutrient reduction policies are soundly based. The Integrated Framework, agreed in September 2013, included regular reviews of relevant science (including land and water) underpinning the policy approach (including the appropriateness of the overall catchment target). Reviews are proposed for 2017 and five-yearly thereafter.

While the specifics of the five-yearly science reviews have not yet been defined, it has been anticipated a formal process will be established that will include:

- Timeframes for commencing and completing the reviews
- Key science themes that will be considered in the reviews
- Options available if science advice changes.

To provide certainty to landowners and to Regional Council around the reviews, StAG suggested having a specific method in the plan change that clearly defines review requirements and processes. Including a method like this was also suggested in feedback received during consultation.

Staff agree that including a method to be clear about the science and policy review process is the most appropriate way to move forward given the inherent uncertainties in the information base. The alternatives would be putting things on hold until more science is available, or phasing in rules between 2017 and 2032 as the science improves.

#### Recommendation a)

Given the high quality of our science, and the need for certainty for everyone involved, it is recommended that this Committee:

<sup>&</sup>lt;sup>7</sup> Trends and state of nutrients in Lake Rotorua streams, 2013. Bay of Plenty Regional Council Environmental Publication 2013/08. See www.rotorualakes.co.nz/vdb/document/769

Agrees the most appropriate option for managing science uncertainty is to ensure that science and policy reviews and responses are included as a method in the plan change.

## 6.2 Social and economic impacts

#### Issue

Work on rule development to this point has been focused on considering and assessing the most appropriate ways of achieving the direction set in the RPS. Staff have drawn on a wide range of economic literature and experiences from around the country, and have also contracted specific pieces of work to support this iterative policy development.

In all decisions so far, staff have been clear that there are costs, benefits and risks of new rules to manage nitrogen loss in the Lake Rotorua catchment (Appendix 5). The Regional Council, community and landowner costs were communicated throughout the consultation period (see factsheets in Appendix 6 and 7 as examples).

The most recent report contracted (and that was reported to Regional Council in June this year) showed the direct impact of allocating NDAs to individual dairy and drystock farms (Perrin Ag's 2014 report "Rotorua NDA impact analysis").

We also have three additional pieces of work underway:

- 1. Catchment modelling of impacts on individual farms and industry sectors, including farm equity changes and debt servicing implications
- 2. Assessment of district wide impacts (tourism etc.)
- 3. Estimated impacts on land value

Messaging around the development of rules has always been that the scale of change required to achieve Lake Rotorua's sustainable nitrogen limit is significant and cannot be underestimated.

#### What we heard

The community raised considerable concerns around the potential social and economic impact that the draft rules may have on the Rotorua community. Specific concerns were raised around the following issues:

- The significant costs for landowners to get consent, and to achieve the allocated NDAs for landowners
- Significant monitoring, enforcement and implementation costs for Regional Council

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<sup>&</sup>lt;sup>8</sup> Full report available online at www.rotorualakes.co.nz/vdb/document/736

- The impact of rules on land value
- Significant economic and social impacts on the wider community
- Undermining the reason community members choose to live rurally.

Also of concern to the community was that the rules have been developed without an absolute understanding of the costs and impacts that they may have, and that consultation has occurred in the absence of a finalised section 32 evaluation report.

## Staff response

Regional Council has been clear that there will be community and individual costs to address this environmental issue. To solve Lake Rotorua's water quality problem there will be significant and direct costs to pastoral farmers, and indirect costs and downstream impacts to industries such as suppliers, manufacturers, processors, contractors and the Rotorua community in general.

Work done to date has helped build a picture of the economic impact. However, the additional work underway (see above) will help us better understand the scale of this impact and will be a critical consideration in the next step of decision making. The section 32 evaluation report will bring together all of the information and decisions made through the iterative policy process and assess the range of risks, costs and benefits of introducing the new rules. This information will fully inform decision making for notification of the rules.

Originally staff were planning to provide decision-makers with the section 32 evaluation report close to the time that the rules would be notified. Given the widespread concerns about the direct and indirect impacts the rules may have, it is prudent that Regional Council and Partners have more time to give feedback on the section 32 evaluation report prior to notification.

#### Recommendation b)

It is recommended that this Committee:

Agrees that staff will provide Regional Council and Partners with the section 32 evaluation report in March 2015 and delay notification until May 2015 to allow feedback on the costs, benefits and risks of the new rules.

#### 6.3 Managing small properties

Issue

Under the draft rules, properties less than 2ha and properties between 2-40ha discharging less than 10 kgN/ha/yr would have been permitted.

It was considered properties less than 2ha in the catchment pose a very low risk of moderately intensive grazing use such as dairy support, at least on a commercial scale. Currently, non-reticulated properties less than 2ha and within 200m of lake edge will need On-site Effluent Treatment Plan consent.

There are approximately 980 properties between 2-40ha in the catchment. The thinking behind the 40ha and 10 kgN/ha/yr thresholds was to achieve a balance between the risk of nitrogen loss and the need to actively manage it. Staff considered that the adverse effects from these smaller properties could be managed through conditions on permitted activities.

The 40ha threshold was proposed because properties over 40ha make up approximately 70% of the catchment area and contribute over 80% of the total pastoral load of nitrogen. This size threshold is also consistent with implementation of Rule 11 to date.

The table below provides a breakdown of property sizes (>2ha) in the catchment:

Land area (ha)	# legal parcels	Estimated # of properties
2 – 10	660	528
10 - 20	192	154
20 - 40	128	102
40+	228	91
TOTAL	1208	875

#### What we heard

Strong opposition to the draft rules was received by small block owners for the following reasons:

- Surprise that new rules coming would impact their ability to use their land as they liked. For example, grazing is necessary for pasture control and a key reason why they choose to live rurally
- Draft rules are more favourable for properties less than 2ha that have no expectation to lower their nitrogen loss
- How the land is used can vary hugely in the 2-40ha property size range and one rule will not fit all
- Perception that nitrogen loss from smaller properties is less than commercial farming
- Difficulty in knowing whether smaller properties would meet the 10 kgN/ha/yr threshold, particularly under horse grazing
- Resource consents for smaller properties have the potential to be unnecessarily demanding on the skilled resources required for delivering certified nutrient budgets

• Impact on land values, especially given that many lifestyle blocks do not generate an income.

#### Staff response

Staff have maintained throughout the consultation process that everyone will need to be a part of the lake solution, including owners of smaller rural properties. However, in response to community feedback, staff have reconsidered how rules could be structured to manage smaller blocks in a way that provides:

- Fairness between management of properties under and over 2ha
- Time and support for small block owners to accept change will be required.
   They have had little involvement with Rule 11 and many were unaware that new rules would impact them
- Targeted nitrogen management for potentially higher nitrogen loss properties in the first five years
- An approach that recognises variation of land uses for smaller properties.

Staff suggest properties under 10ha could be permitted with blanket exclusions. These exclusions are likely to include, dairy, intensive beef, nurseries and cropping, or land use that is part of a larger farm enterprise. These land uses would require consent regardless of property size.

However, if the 2022 target is not tracking satisfactorily, these smaller properties might then need to come under the regulation framework. Under this circumstance, a new plan change including rules may be required.

Reasons for a revised smaller property size threshold include:

- Properties less than 10ha are more likely to be lifestyle-focused rather than a commercial grazing enterprise and are therefore less likely to have intensive farming (although cropping/ nurseries are possible)
- If smaller properties want to continue with status quo (e.g. same stock intensity), there may be a potentially higher comparative financial impact on smaller properties. For example, many lifestyle blocks do not generate an income that could offset costs of compliance
- Allows time to focus on education, engagement and good management practice for smaller properties in the first five years (and perhaps beyond)
- They may need to contribute to nitrogen reduction when the On-site Effluent Treatment Plan is reviewed in 2016 and incorporated into the Regional Water and Land Plan
- Consenting for small properties has the potential to be unnecessarily demanding on the skilled resources required for supporting certified nutrient budgets for managing nitrogen loss.

It should be noted that any changes to property size thresholds will change the likely number of consents that are required. This has implications for Regional Council resourcing.

The original estimate of the number of consents that could be required was approximately 700 (91 properties greater than 40ha, and up to 600 properties between 2-40ha that could be leaching more than 10 kgN/ha/yr). By increasing the permitted threshold from 2ha to 10ha it is likely that consent numbers will more than halve, with only approximately 300 consents required.

To address any consenting burden that could occur as the rules become operative, staff also propose that the start date for properties between 10-40ha is delayed until 2022. Between now and then the focus should be on good management practice and establishing a baseline land use for properties in this property size range. These properties would be required to submit information annually from 2017 detailing their land use.

Reasons to delay the rule start for smaller properties include:

- Allowing time for landowners to accept the need for change. Reductions will still be required, but at a later date
- Allowing time for regulators to better understand how this land is being used and therefore how the rules will apply
- Balancing out the administrative burden compared to all properties requiring consent at once
- Providing time for best management practice and mitigation options to be developed specifically for smaller properties, including options eligible for incentive funding.

The rule structure that was consulted on is as follows:

From 2017	Less than 2ha	2ha – 40ha	40ha +
Permitted	All properties	Properties with nitrogen loss that is less than 10kg N/ha/yr	Not applicable
Controlled	Not applicable	Properties with nitrogen loss that is more than 10kg N/ha/yr AND have approved Farm Nutrient Plans showing managed reduction to the NDAs	Properties that have approved Farm Nutrient Plans showing managed reduction to the NDAs
Restricted Discretionary	Not applicable	Properties with nitrogen loss that is more than 10kg N/ha/yr AND do not have approved Farm Nutrient Plans showing managed reduction to the NDAs	Properties that do <u>not</u> have approved Farm Nutrient Plans showing managed reduction to the NDAs
Non- Complying	Not applicable	Properties that do not meet above requirements Properties that have increases in nitrogen loss that are not offset	

A revised rule structure is recommended as follows:

From 2017	Less than 10ha	10ha – 40ha	40ha +	
Permitted	All properties except those with intensive land use*	2017 – 2022	Not applicable	
		All properties, subject to providing annual information on land use (including stock rates)		
		From 2022		
	Properties with nitrogen loss that is less than 10kg N/ha/yr			
	Properties with	From 2022	NIII I C	
Controlled	intensive land use*  AND have Farm	Properties with nitrogen loss that is more than 10kg N/ha/yr AND have approved Farm Nutrient Plans showing managed reduction to NDAs	Nitrogen loss from properties that have approved Farm Nutrient Plans showing managed reduction to the NDAs	
Restricted Discretionary	Properties that require resource consent but do not show managed reduction			
Non- Complying	Properties that have increases in nitrogen loss that are not offset			

<sup>\*</sup> To be defined but will include dairy, intensive beef, nurseries and cropping, or land use that is part of a larger farm enterprise.

#### Recommendation c)

It is recommended that this Committee:

Agrees to amend the permitted threshold to properties under 10ha (excluding specified intensive land uses) and delay regulatory requirements for properties between 10-40ha until 2022.

#### 6.4 Timeframes, managed reduction and the 2022 target

Issue

The RPS Policy WL 6B part (c) states that:

No discharges shall be authorised beyond 2032 that result in the limit for Lake Rotorua being exceeded. A catchment intermediate target for the managed reduction of nitrogen loss is to be set to achieve 70% of the required reduction from 746 t/yr to 435 t/yr by 2022.

The development of the draft rules have been underpinned by the key elements of this policy – managed reduction, a 2022 intermediate target, and a 2032 limit to be achieved.

The table below is based on the Integrated Framework approach approved by Regional Council and Partners in September 2013 to achieve the required reductions. It reflects a *shared* responsibility between Regional Council (as administrator of public funds) and rural land owners:

	By 2022 (tN)	By 2032 (tN)
Engineering solutions	50	
Incentives	100	
Gorse	30	
Rules (and NDAs)	44	96
Total	224	320

To reach the 2022 target, the pastoral landowner share will need to be achieved by the reduction of 44 tonnes on individual farms through NDAs. In particular, the agreement reached through the Integrated Framework is that "staged reductions via Farm Nutrient Plans will be mandated through Resource Consents".

At the June 2014 RDD meeting, Regional Council confirmed its intent that FNPs will be a condition of consent and will require standard minimum information requirements such as:

- Benchmark / current rate of nitrogen loss
- The allocated Nitrogen Discharge Allowance
- A pathway of managed reduction (showing target reductions by certain dates)
- Mitigations to achieve the Nitrogen Discharge Allowance (supported by an Overseer file where appropriate)
- Lifecycle of a FNP and the process to update or amend it.

#### What we heard

Through consultation, the need for rules was questioned given Lake Rotorua has reached its target TLI for the last three years. Common themes raised include:

- Timeframes in which landowners are expected to make changes are unrealistic
- Significant progress already made towards reaching the reduction target
- Allow landowners to make reductions voluntarily
- Look at options other than rules
- FNPs should not be a part of the consenting process, or used as a compliance tool.

#### Staff response

The rules must be structured around delivering the 44 tonne nitrogen reduction component by 2022 and the additional 96 tonne reduction by 2032. Tracking progress against the catchment target will require Regional Council to collect information about nitrogen loss from individual properties. Staff have expected to deliver this through the FNPs and associated reporting requirements.

Staff are currently working with StAG on the specific wording of the FNP minimum information requirements. There has been a significant amount of debate about how much information the Regional Council should be asking for within FNPs. Concerns have been raised that specifying what landowners will do and by when is an unfair and unrealistic burden given the major year-to-year changes in farm systems that can occur in response to volatile input costs, product prices, climate variability and changes to farm management (e.g. a new sharemilker). In particular there has been push back around requiring any staged or managed reduction.

Staff have been clear that in order to provide reasonable certainty that both the 2022 and 2032 targets will be achieved, individual farm plans **must** show:

- The pathway of managed reduction with specific targets at certain dates, and
- Mitigations to achieve the Nitrogen Discharge Allowance.

To continue to progress the FNP design, confirmation from Regional Council is required that the pathway of managed reduction should be a critical requirement.

#### Recommendation d)

It is recommended that this Committee:

Reconfirms its expectations that individual Farm Nutrient Plans will show a pathway of managed reduction with specific targets at certain dates.

#### 6.5 Nitrogen allocation

Issue

The chosen allocation approach is vitally important as it determines how NDAs will be calculated i.e. who gets what.

StAG and staff have assessed a range of allocation approaches and their applicability to the Lake Rotorua catchment. In September 2013, Regional Council received this advice and agreed allocation should be sector-based (i.e. different sectors would receive different NDAs). Key reasons that support sector averaging as an allocation approach include that it best recognises existing land use, investment, and current rates of nitrogen leaching, and supports good land use practice.

Sector averaging as an allocation approach requires sectors to be clearly defined. In September 2013, Regional Council confirmed the sectors that would receive allocation of NDAs would be dairy, drystock and forestry.

The rules framework proposed in September 2013 included fixed sector averages of 35 kgN/ha/yr for "dairy" and 13 kgN/ha/yr for "drystock"<sup>9</sup>. In June 2014, Regional Council accepted a refined version of the sector allocation approach to include NDA ranges based on Rule 11 benchmarks as shown in the table below.

Sector	N loss range
<b>Dairy:</b> <i>includes</i> the effective pasture area in the milking platform, fodder and effluent but <i>excludes</i> runoff (e.g. dairy support) and forest.	30-40 kgN/ha/yr
<b>Drystock:</b> <i>includes</i> the effective pasture area in sheep, beef, deer, horticulture, cropping and dairy support but <i>excludes</i> forest.	10-20 kgN/ha/yr
Forest: includes native bush as well as forestry.	3 kgN/ha/yr

Nitrogen allocation matters because it puts significant constraints on how land can be used. Regional Council needs to be confident that the approach that it uses to allocate NDAs is the most appropriate for the Lake Rotorua catchment. StAG and staff developed the sector-based ranges through an iterative policy process over the last 18 months. There are many other alternatives and it was important the community contributed to this thinking.

Through consultation, staff specifically asked the community their views on alternatives to the sector-based range approach, including:

- Fixed sector averages (i.e. 13 kgN/ha/yr for drystock and 35 kgN/ha/yr for dairy)
- A single fixed average for all pastoral land use (i.e. 18 kgN/ha/yr)
- Land use capability.

What we heard

Views on allocation were diverse. More than three quarters of the respondents did not support the suggested approach to allocate nitrogen to land use. The main messages were:

 Those with current high nitrogen loss tend to support grandparenting and/or sector ranges based on historic land use

<sup>&</sup>lt;sup>9</sup> Staff note that these NDAs have been developed from predictions of nitrogen loss using Overseer 5. Work is currently underway to reassess these values using the more recent Overseer 6 version, and the notified plan change will include more up-to-date numbers. Although the Overseer 6 NDA values will increase, so will the Rule 11 and status quo Overseer 6 nitrogen loss values. This means that the average percentage nitrogen reduction required by the rules will be the same

- Those with low nitrogen loss tended to support equal averaging or land use capability
- Those with low nitrogen loss believe sector averaging allocation rewards the polluters
- Pre-2001 mitigation, such as retiring land, needs to be recognised.

#### Staff response

Two significant pieces of work are being undertaken to assess allocation approaches for this catchment:

- Economic impact modelling (as discussed in section 6.2 above)
- An allocation workshop with invited participants on 11 December 2014.

Staff have been clear that regardless of the allocation method chosen, any allocation approach will have relative "winners" and "losers". There is no right way to allocate and choosing an allocation approach is a political decision. The allocation approach chosen will directly determine the NDAs allocated to each property but may not impact greatly on the rules structure being proposed.

Regional Council will be required to make a decision on the preferred allocation approach once the workshop has been undertaken in December 2014 and the modelling work is complete early 2015. This decision will need to be made prior to notification of the rules.

#### Recommendation e)

It is recommended that this Committee:

Notes staff will seek a decision from Regional Council on the nitrogen allocation approach in February 2015, following the findings from the allocation workshop and economic modelling results.

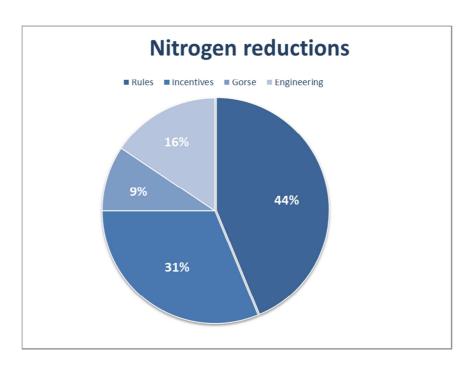
## 6.6 Regulatory focus

#### Issue

In order to reach the sustainable nitrogen limit for the lake, loads to the lake need to be reduced by 320 tN/yr. The Rotorua Te Arawa Lakes Programme has previously agreed that 50 tN/yr can be reduced through engineering solutions, leaving 270 tN/yr that can only come from targeting catchment land use.

The Integrated Framework agreed by Lakes Partners proposes that the 270 tN catchment reductions would be achieved through programmes of gorse removal (30 tN), incentives (100 tN) and rules (140 tN).

44% of the total 320 tN reductions required will be achieved by rules. More than half will be achieved through innovation, incentives and investment:



#### What we heard

It is apparent in the feedback received that many landowners are assuming that the water quality issue in Lake Rotorua is being addressed through rules alone. A real focus in the feedback was on issues such as:

- Rules are not the answer explore other solutions
- Focus on voluntary and collective action
- Establish a memorandum of understanding with farmers
- It is unfair for the rural landowners to pay for a clean lake.

### Staff response

It was clear that there is a misunderstanding amongst the general community that the Regional Council is proposing a regulatory-only solution. This was probably due to the consultation focusing on the draft rules rather than the whole Integrated Framework. The draft rules focus was considered appropriate because it is the regulatory component of the framework that is subject to the formal RMA process, and the regulatory component that will have the direct impact on landowners. It was seen as critical to build an awareness of the draft rules across the catchment.

In future, there is a need to have a more coordinated and comprehensive communications message about the outcomes being sought for Lake Rotorua. This includes the importance of the lake at a national, regional and district level, the overall package of work that has been agreed and the investments that have already been made towards improving water quality in the lake.

#### Recommendation f)

It is recommended that this Committee:

Agrees that all future communications tell the whole story of what is and has been done for Lake Rotorua to put the regulatory component in context.

# 7 Additional issues raised during consultation and discussions

## 7.1 Certainty of the public / private split of the 270 tonnes

A critical step in progressing rule development, incentive design and trading options is understanding how Regional Council will ensure the 2022 target is reached and what options Regional Council has if that target isn't met. A key matter in this regard is providing certainty for the pastoral sector as it responds to the rules.

Under the Integrated Framework, Regional Council has committed to achieving a reduction of 30 tonnes through the conversion of gorse to low-nitrogen land use and 100 tonnes from the purchase of nitrogen loss from landowners in the catchment via the incentives scheme. A further 50 tonnes is to be achieved through engineering solutions.

The Regional Council commitment is for the life of the Integrated Framework. If the Integrated Framework was to be changed – for example as a result of a science review – then the commitment would also be up for debate. In relation to the gorse and incentives contributions to the target, Council's current position is based on the adoption of the Integrated Framework. This excerpt from the report adopting the framework describes the commitment within the framework:

Programme	tN	Actions and Accountability
Rules Programme	140tN	<ul> <li>Approved Farm Nutrient Plans which will include specific plans for N reduction - implemented for individual farms by 01 December 2015</li> </ul>
		- Staged reductions via Farm Nutrient Plans mandated through resource consents
		- Individual farmer resource consents applied for by 01 December 2017
		- Farmer accountability, obligatory by 01 December 2032
Incentives Programme	100tN	- Regional Council accountability, to be achieved by 01 December 2022 through the incentives scheme
Gorse Re-vegetation Programme	30tN	- Regional Council responsibility through a gorse conversion programme to be achieved, in collaboration with farmers and landowners, by 01 December 2022 using separate funding

The above commitment implies that any shortfall against the 130 tonne target will need to be managed within the Rotorua Te Arawa Lakes Programme as a public solution. This would need to be a discussion with the community within a future Long Term Plan process if it was required. If the Integrated Framework was to be renegotiated – for example as a result of a science review – then the commitment would also be up for debate.

The report adopting the Integrated Framework was clear that the recommended rules approach was highly dependent on the incentives programmes. The report also indicated the risks from depending on the incentives programmes could be mitigated through monitoring and review processes. As discussed at the workshop on 6 November 2014 there are a range of options available.

Option 1 Balance of 130 tonnes not achieved will shift to rules requirement	<ul> <li>Creates uncertainty for farming decision making</li> <li>Increased risk of creating uneconomic farm property</li> <li>Greater resistance to rules and rule implementation</li> <li>Resistance to engagement with incentives Scheme</li> <li>No price escalation of incentives</li> <li>Undermines credibility of the Incentives Scheme (by association) – potential for pastoral sector to not support the scheme due to this association</li> </ul>
<b>Option 2</b> Retention of balance as a community responsibility	<ul> <li>Potentially increased community cost</li> <li>Potential Nitrogen price escalation in the future</li> <li>Ability to utilise engineering solutions, "other" securing of Nitrogen</li> <li>Certainty for rules</li> </ul>
<ul> <li>Option 3 Split the</li> <li>responsibility for the balance</li> <li>As above for Option 1</li> <li>Uncertainty as to impact – substantial/minimal?</li> </ul>	
Option 4 Compulsory acquisition (using balance of funding)	<ul> <li>Creates uncertainty for farming decision making</li> <li>Likely to be strongly resisted</li> <li>Seen as overly draconian, would need to be established within rule framework with high likelihood of legal challenge</li> </ul>

**Option 2** was recommended by staff however there was discussion on how it should be expressed. In particular there was concern over the risk being accepted by the community who have already contributed to addressing lake water quality.

The following table identifies the risks and possible mitigations associated with the commitment:

Risk description	Significance	Mitigation
Incentives Scheme cannot afford Nitrogen purchases	High	Clear policy direction on price/budgets, regular reporting, experienced negotiation resources available to Incentives Board
Incentives and gorse schemes cannot attract proposals	High	Branding, robust marketing, relationship building, adequate implementation resourcing
Conversion rate of hectares for gorse scheme not adequate	Medium	Survey processes to identify opportunities, information on financial benefits, proactive approaches by staff to landowners
2022 timeframe not being met	Medium	Schemes could be extended – acknowledging this does not meet RPS requirement
Funding withdrawn by Funding Partner	High	Limited

There is also some mitigation from an ability to potentially substitute between the Incentives Scheme, the gorse programme and a range of engineering projects if one element does not meet its target.

There is limited ability to forecast the above programme risks. It will only be as the programmes progress that such an assessment can be made with a degree of robustness. Monitoring of progress will be a critical part of understanding whether the risks are likely to eventuate.

Altering the commitment - or even Regional Council reserving the ability to make alterations - carries a number of significant risks. These include:

- Creating uncertainty for farmer decision making
- Increased risk of making farm businesses uneconomic
- Greater resistance to rules and rule implementation
- Resistance to engagement with Incentives Scheme
- Undermining the credibility of the Incentives Scheme (by association) –
  potential for pastoral sector to not support the scheme due to this association

**Option 2** remains the preferred option. There are mitigations available however it is thought that expressing as more of a joint responsibility provides a better context for the commitment that has been made. In particular there is an underlying expectation that the pastoral sector will support the Incentives Scheme and the gorse project. If this does not occur then the monitoring and review process would highlight the risk and mitigation would need to be collectively discussed.

#### Recommendation g)

It is recommended that this Committee:

#### Adopts the statement:

The Integrated Framework places a responsibility on the Rotorua Te Arawa Lakes Programme (and the Regional Council as the lead organisation) to use its best endeavours to achieve a 130 tonne nitrogen reduction. The pastoral sector has a responsibility to achieve a 140 tonne nitrogen reduction (through responding to nutrient management rules) and the Programme will not seek to require more than this. The successful delivery of these responsibilities relies on all parties supporting all parts of the Integrated Framework.

#### 7.2 **Overseer**

Questions around the use of Overseer were raised throughout the consultation period, including the validity of using the model to estimate nitrogen losses on farms, as well as the model's fit for purpose in a regulatory context.

These questions are not new, and are being raised throughout the country.

Overseer is New Zealand's leading farm-scale nutrient budget model. It assists farmers, fertiliser representatives and farm advisers to examine nutrient use and movement within a farm (inputs and outputs) to optimise production and environmental outcomes. It is supported by over two decades of farm system and nutrient cycling research.

There are limitations with the Overseer model that are well recognised. These include technical limitations due to a lack of calibration in certain farm systems and geophysical conditions, as well as the inherent errors that will occur in estimating losses from a complex biological system. There are also limitations associated with how it is used. Users need to enter actual and reasonable input values and require a good understanding of farm systems in general and the farm being modelled in particular.

All Regional Councils are now obligated to implement the National Policy Statement for Freshwater Management (NPS-FM) and its directive to set and manage to water quality limits, including nutrient thresholds where relevant. The combination of diffuse nutrient environmental impacts and policy pressure has raised expectations around using Overseer as a tool in the setting of policy limits, associated RMA rules, compliance and advice.

These expectations need to be informed by the actual capabilities and limitations of Overseer, combined with Council experiences in using it. Given the public and "industry good" investment and ownership of Overseer, the NPS-FM drivers and broadly common challenges facing multiple Regional Councils, a collaborative project is underway that involves Crown Agencies, Regional Councils, industry bodies and the Overseer owners.

The purpose of the project is to enable the appropriate and consistent use of Overseer by Regional Councils in setting and managing to water quality limits. Bay of Plenty Regional Council is taking a lead role in this national project.

This project will take time to deliver. However, a specific report has been contracted to support the Rotorua rules project work: "Using Overseer within Rules for the Lake Rotorua Catchment". The report recommends that Overseer is fit for the purpose of regulating nitrogen loss in the Lake Rotorua catchment and provides advice on appropriate ways to reference and use the model within the policy and rule framework.

#### Recommendations h) and i)

It is recommended that this Committee:

- Approves the continued use of Overseer in the policy and rules for the Lake Rotorua catchment, guided by the recommendations of the report "Using Overseer within Rules for the Lake Rotorua Catchment".
- Notes staff will be responsive to outcomes of the Overseer national collaborative group, and will adapt where required as part of the five-year policy and science reviews.

#### 7.3 Groundwater science and boundaries

The community raised significant concerns around groundwater science, groundwater boundaries and the application of new rules to areas of groundwater "uncertainty".

Consultation on the draft rules incorporated new groundwater maps of the catchment that includes properties not previously captured under Rule 11 of the Regional Water and Land Plan. It also captured properties in the Waikato region (see maps in Appendix 8).

The underlying principle that staff have been working to in developing the rules has been that rules should apply across all land use activities that contribute to the total nitrogen load to the lake. This includes land use activities in all parts of the groundwater catchment.

Applying rules to the entire groundwater catchment and not just the surface water catchment poses some challenges:

- The groundwater catchment boundary is not as certain as the surface water catchment boundary
- Landowners outside of the Rule 11 catchment have not had nutrient rules to date, and have not been engaged in this issue over the last decade

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<sup>&</sup>lt;sup>10</sup> See http://www.rotorualakes.co.nz/vdb/document/735

Some of the groundwater catchment is in the Waikato region.

Appendix 9 outlines the scale of the issues in relation to 1, 2 and 3 above.

## Properties within the Bay of Plenty region

To date staff have assumed that the new rules for the Lake Rotorua catchment would apply across all pastoral activities that contribute to the total nitrogen load. This would include properties within the groundwater catchment.

There is still a level of uncertainty in the boundary of the groundwater catchment and the best-estimate includes much larger error margins than the best-estimate surface water boundary. However, this shouldn't preclude taking a precautionary approach and using the best information available for managing the total nitrogen load.

Extending the rules out to the groundwater catchment will impact on approximately 20 landowners in the Bay of Plenty region. The precise nature of this impact is not well understood, but is likely to be significant given many have not had to meet the capping rule at all, and others are using their non-Rule 11 parcels to increase productivity. Options for these parcels are:

- 1. Only apply rules to the Rule 11 boundary
- 2. Phase in new rules at a different (i.e. slower) rate than for the Rule 11 catchment already capped
- 3. Bring in new rules at the same time as the Rule 11 catchment boundary.

Staff consider that it is appropriate to bring in new rules at the same time as the Rule 11 catchment boundary, and work with the individual affected farmers to ensure they are provided the advice and support required.

If the rules are not applied to the whole groundwater catchment, then a decision will need to be made about how we can reach the RPS target. It would be unfair to require affected landowners to make reductions on behalf of those that don't fall under the rules, so it is likely that the target would need to be amended accordingly.

#### Properties within the Waikato region

Extending the rules out to the groundwater catchment will impact on approximately 26 landowners in the Waikato region. Again the precise nature of this impact is not well understood but will be significant.

The RPS is clear in its expectations that cross-boundary issues would be managed. However, there are substantial political issues associated with imposing our regional rules on Waikato properties.

It is difficult to determine how much of the lakes' nitrogen load can be attributed to properties in the Waikato. The steady state load of 755 tN/yr is associated with the 45,721ha groundwater catchment. The Waikato makes up about 5% of this catchment, so could be contributing up to 40 tN/yr to the lake.

Staff have met with Waikato Regional Council to discuss this issue. They have indicated support for working with us to manage the particular properties, but prefer

to do so within their own NPS-FM timeframes. That is, rather than run a separate plan change just for Rotorua groundwater properties, they would prefer to address these properties when limit setting occurs in the relevant parts of their region.

## Recommendation j)

It is recommended that this Committee:

Agrees that the new rules will apply to the whole groundwater catchment, and where properties fall within Waikato Regional Council's jurisdiction, staff will work with that Council to ensure the issue is addressed through their limit setting processes.

#### 7.4 Consent duration

The draft rules staff developed included a consent duration of 20 years for controlled consents, and 5 years for restricted discretionary consents to cover properties that do not opt to show managed reduction. The intent was to incentivise managed reduction by providing a controlled activity status (i.e. consent must be given) and a relatively long consent period.

Many responses asked for a 35 year consent period to support farm planning, financial decisions and provide certainty. Over three quarters of the respondents did not support a short-term consent for farmers who do not want to make planned, progressive nitrogen reductions.

Under the Resource Management Act, s.123(d), the maximum consent duration for nutrient loss is 35 years. To date our Regional Council has generally limited 35 year consent periods to structures on the basis that they have very little risk of adverse effects beyond their original construction.

The RPS Policy WQ8B recommends that water quantity consents to be no longer than 15 years. A similar precautionary approach could be assumed for water quality consents.

#### Recommendation k)

It is recommended that this Committee:

Reconfirms a 20 year consent duration for controlled activities and a 5 year duration for restricted discretionary activities.

## 8 Next Steps

The timeframe to deliver rules back to RDD by May 2015 is ambitious. As outlined in this report, a lot of work needs to be completed and fully considered between now and then.

Key steps for December 2014 include the allocation workshop, completion of the catchment modelling and land value impacts project. By January 2015 the district impact analysis will also be completed.

In February 2015, staff will report back on the allocation workshop and will be seeking a decision on the allocation approach to support the rules framework.

The section 32 evaluation report is hoped to be complete and ready for Regional Council and Partner feedback by March 2015.

Technical and legal advice, regional and national initiatives and StAG input will continue to feed into the rule development process.

# 9 Financial Implications

## **Current Budget**

The development of new regional plan rules is covered by the Strategic Policy (responsive policy) budget. Notification of a plan change to the Regional Water and Land Plan for nutrient management of priority Lake catchments has been planned as a key project.

#### **Future Implications**

The development and implementation of rules and incentives to reduce nitrogen in the Lake Rotorua catchment will have significant resourcing implications for Regional Council, individuals and the community. The section 32 evaluation report will provide critical information around this resource implication, and will allow Regional Council to fully consider future budget implications prior to notification.

Lisa Power
Senior Planner (Natural Resources Policy)

for Programme Leader (Water Policy)

1 December 2014