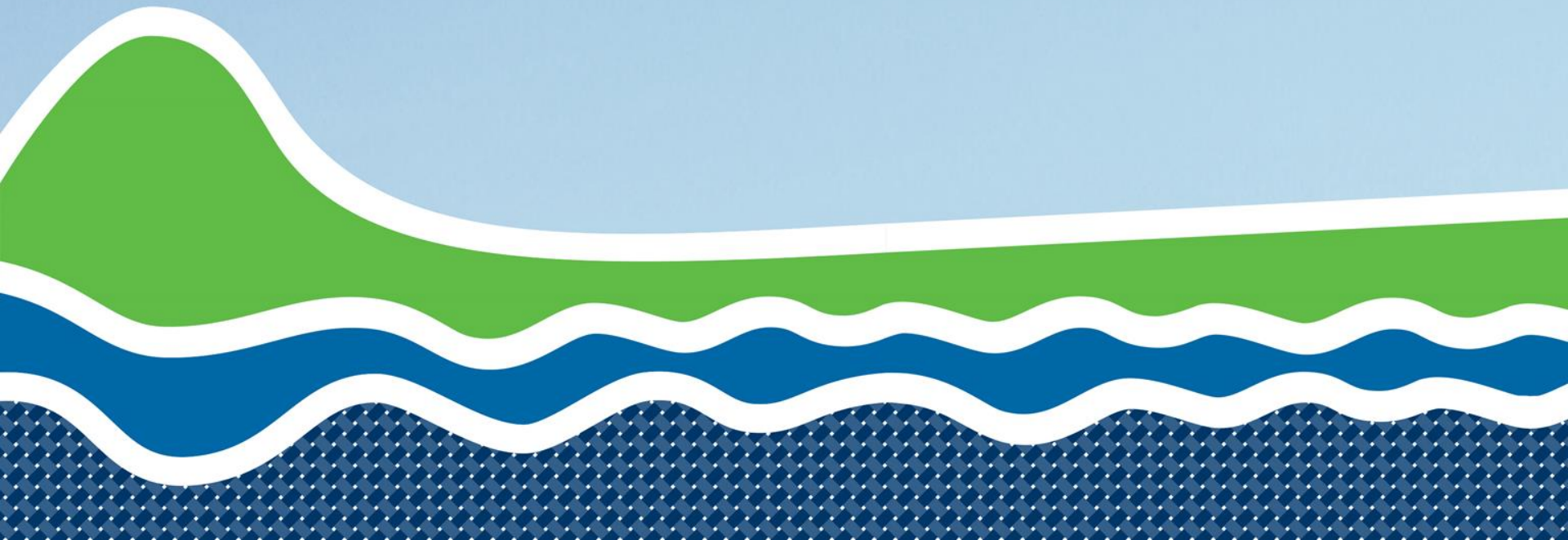


Policy & planning framework



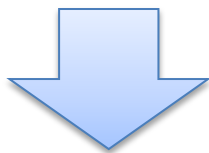
Regional context

Water policy and planning context:

**NPS for Freshwater
Management**

Resource Management Act

Regional Policy Statement



Regional water management

e.g. Water Management Strategy & water
allocation plan change

Regional Water Advisory Panel

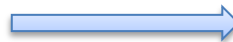
Catchment-based management

E.g. Water management area plans

Community & Co-Governance Groups

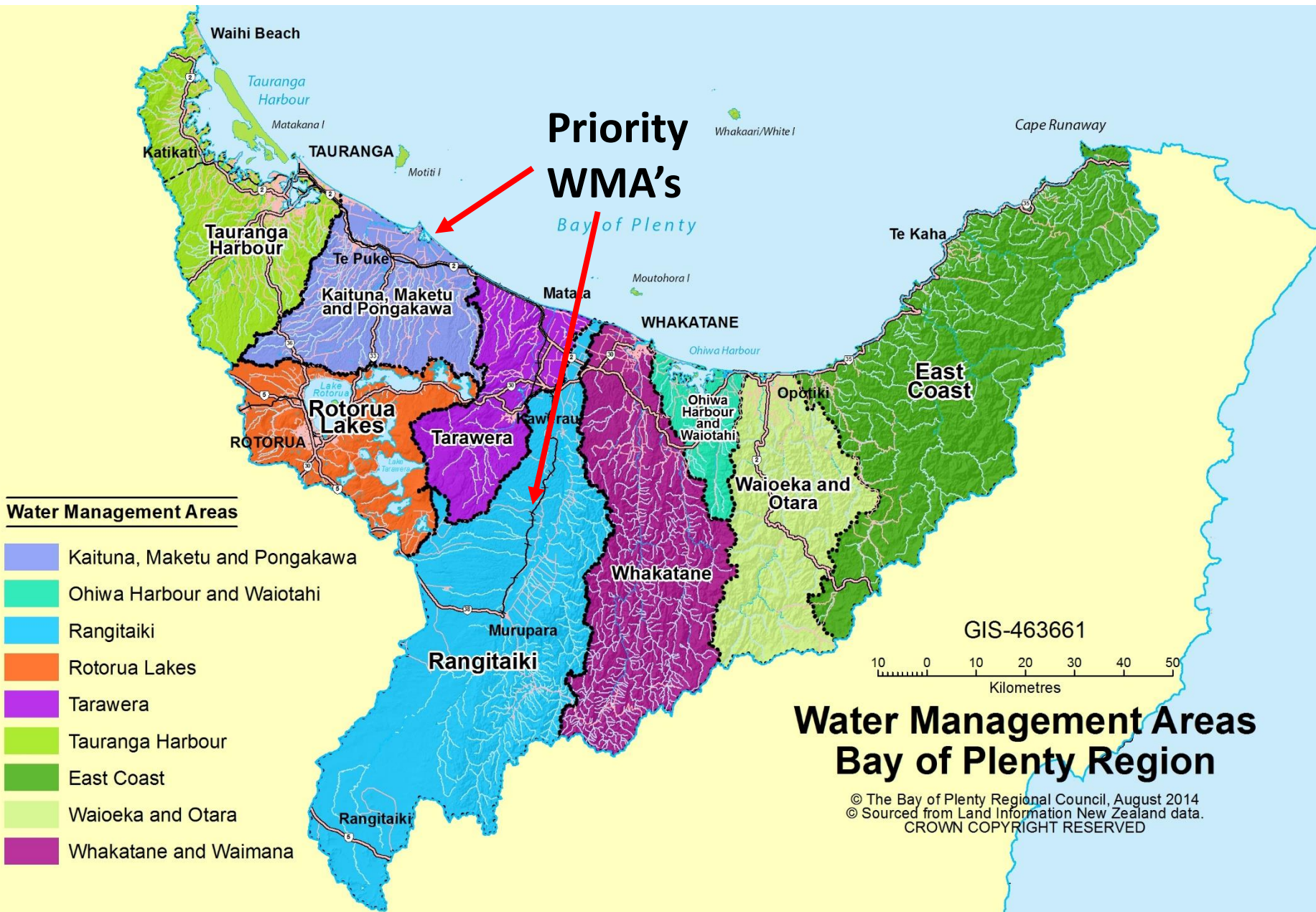


Will need regional
rules



Will need
catchment
rules

**Regional Water and
Land Plan**



National Policy Statement for Freshwater Management 2014

2015

2016

2017

Regional Action
QUANTITY FOCUS

Water Strategy

Water Strategy Policy Implementation

Water Allocation Plan Change

Develop

Consult

Notify

New
RWLP
rules

Supported by Regional Water Advisory Panel

Catchment – based Action
QUALITY FOCUS

Rotorua Rules

Develop

Consult

Notify

New
RWLP
rulesstrategic planning
- underway -

Develop

All Lakes

Consult

Notify

New
RWLP
rules

strategic planning

Develop

Kaituna

Consult

Notify

New
RWLP
rulesstrategic planning
- underway -

Develop

Rangitaiki

Consult

Notify

New
RWLP
rules

Supported by community, advisory groups, co-governance groups etc

Lake Rotorua

Policies & rules



2001: Trophic Level Index target set at 4.2



2008: “Rule 11”: N & P discharges capped

2009: Lake Rotorua and Rotoiti Action Plan:

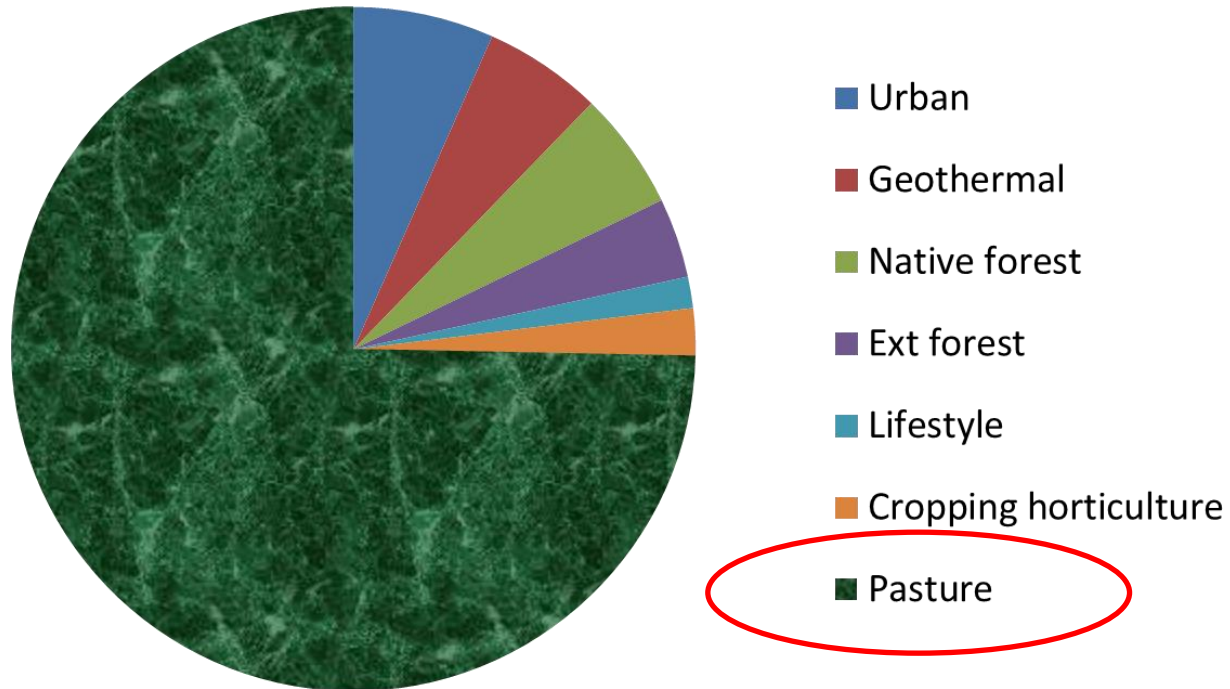


N – target 435t/yr

P – target 37t/yr



Current Nitrogen Export



Policies & rules



Proposed Regional Policy Statement

- Limit set – 435 tN/yr
- To be allocated amongst land-uses
- To be achieved by 2032; intermediate catchment-wide target to achieve 70% by 2020

Ten Year Plan

- \$45.5 million nutrient reduction fund

Tonnes nitrogen/yr	
Current nitrogen load	755
Sustainable nitrogen load	435
Reduction required	320
Possible engineering reductions	50
Pastoral reductions	270
Current pastoral load	526
Sustainable pastoral load	256

50% reduction

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.
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Gorse Programme – 30 tonne reduction

By 2022	Gorse fund	Separate funding to remove 30 tonnes of nitrogen from gorse.
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Draft Rules Structure

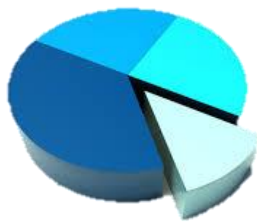
Resource consent types being considered.

Type	Process	Criteria
Permitted	No resource consent is needed but landowners must meet rule conditions	<ul style="list-style-type: none"> • Properties up to 2 ha • Properties between 2ha and 40ha that discharge less than 10kg N/ha/yr • Forest blocks
Controlled	Resource consent needed and must be granted if activity meets the rule conditions. Consent duration of 20 years.	<ul style="list-style-type: none"> • Properties larger than 40 ha or between 2-40 ha discharging over 10kg N /ha/yr with approved Farm Nutrient Plans <u>showing managed reduction</u> to reach the Nitrogen Discharge Allowance (NDA) by 2032
Non Complying	Resource consent needed and can be declined. Consent duration of 5 years.	<ul style="list-style-type: none"> • Properties that do not meet above rule requirements. • Properties that have increases in nitrogen loss that are not offset

Additional option to consider

Restricted Discretionary	Resource consent needed and can be declined. Consent duration of 5 years.	<ul style="list-style-type: none"> • Properties that are larger than 40 ha or between 2-40 ha discharging over 10kg N /ha/yr but do not show managed reductions • Consents may be granted for 5 years depending on catchment wide progress to nitrogen reduction target
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Allocation



Sector	NDA range (N/ha/yr)	Average reduction
Dairy: <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.	30-40kg	30%
Drystock: <i>includes</i> the effective pasture area in sheep, beef, deer , horticulture, cropping and dairy support but <i>excludes</i> forest.	10-20 kg	20%
Forest: <i>includes</i> native bush as well as forestry.	3 kg	N/A



Understanding impacts and options

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Daigneault and McDonald (2012). Evaluation of the impact of different policy options for managing water quality limits

Greenhalgh (2009). Assessment of interventions for the Rotorua Lakes

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Greenhalgh (2013). Approach to assess the impacts of allocation options. Presentation to StAG

Harris (2012). Guidance on allocation decision making (Selwyn Te Waihora)

Kerr (2012). Presentation on Allocation and Cost Sharing

Kingi et al (2012). Solutions for sustainable Rotorua: The farmers' perspective

Lock and Kerr (2008). Nutrient trading in Lake Rotorua: Social, cultural, economic and environmental issues around a nutrient trading system

Park (2014). Final report to BOPRC about using Overseer in new rules for the Lake Rotorua catchment.

Park et al (2014). Nitrogen losses from Lake Rotorua dairy farms – modelling, measuring and engagement

Perrin Ag (2012). Farmer solutions project.

Perrin Ag (2014). Rotorua NDA impact analysis

Timar et al. (2013). Potential impacts of nutrient discharge allowance allocation methods among heterogeneous farmers in the Lake Rotorua catchment

Waikato Regional Council Environment Court decision for Taupo case.

Woodham and Marsh (2011). The effect of water quality on house prices around the Rotorua Lakes. A preliminary analysis

Yao et al. (2013). Planted forests in NZ. Ecosystem conditions and trends.

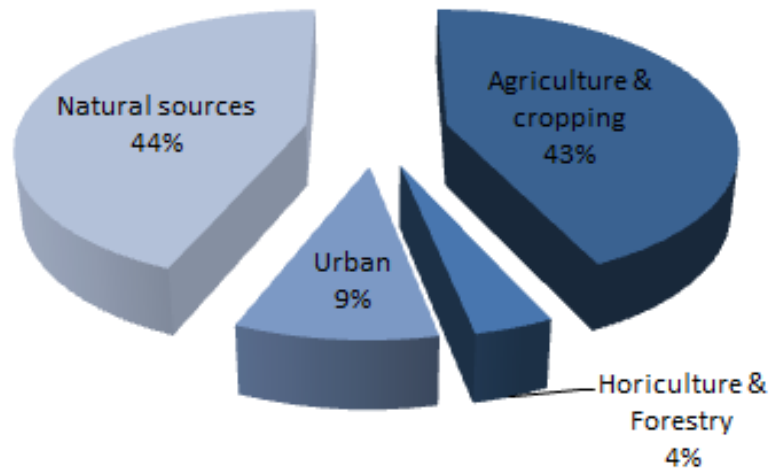


What about phosphorous?

Target: 37 t/yr

- Catchment reductions: 10 t/yr
- In-lake reductions: 25t/yr

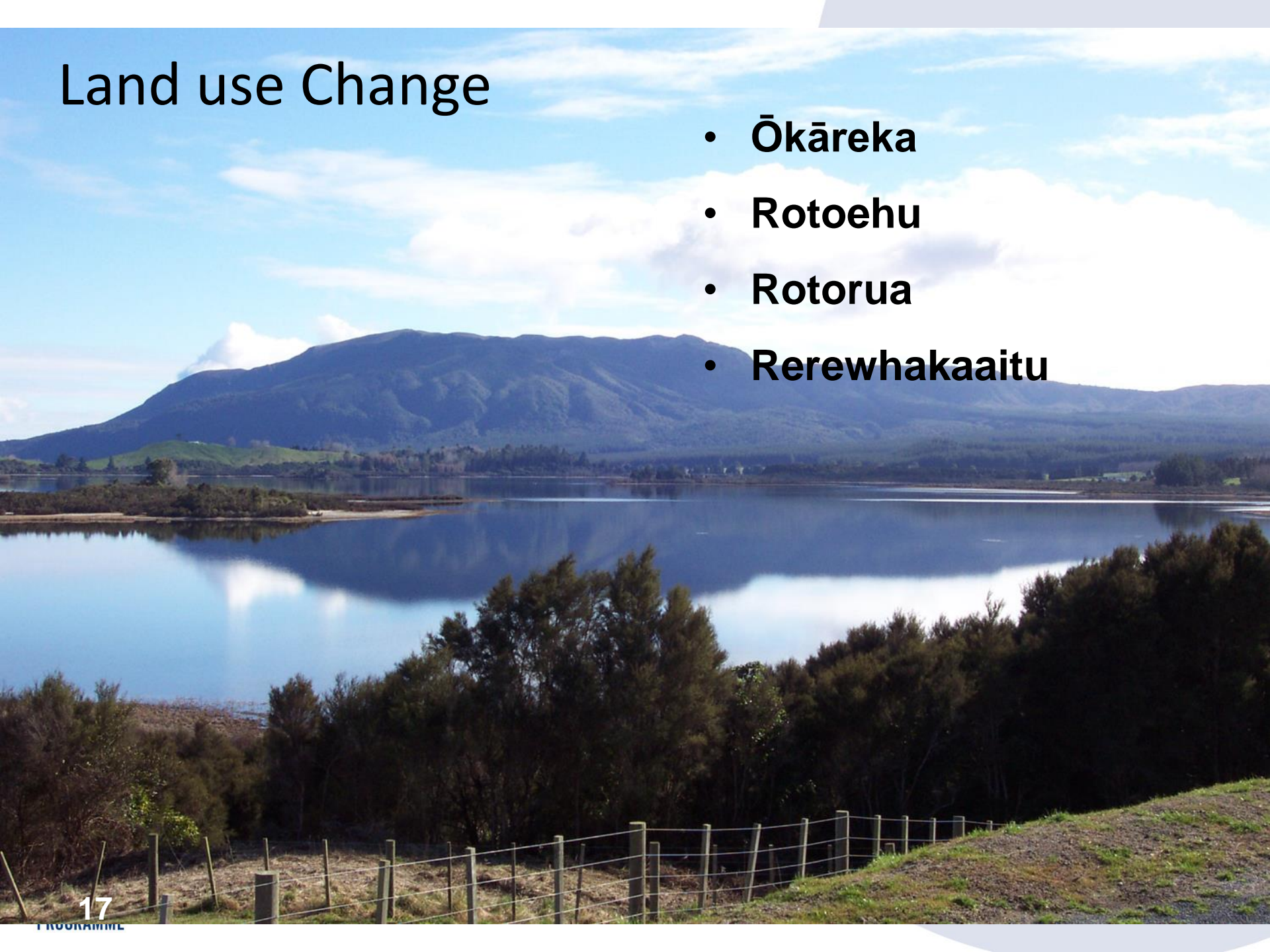
Phosphorus sources for Lake Rotorua



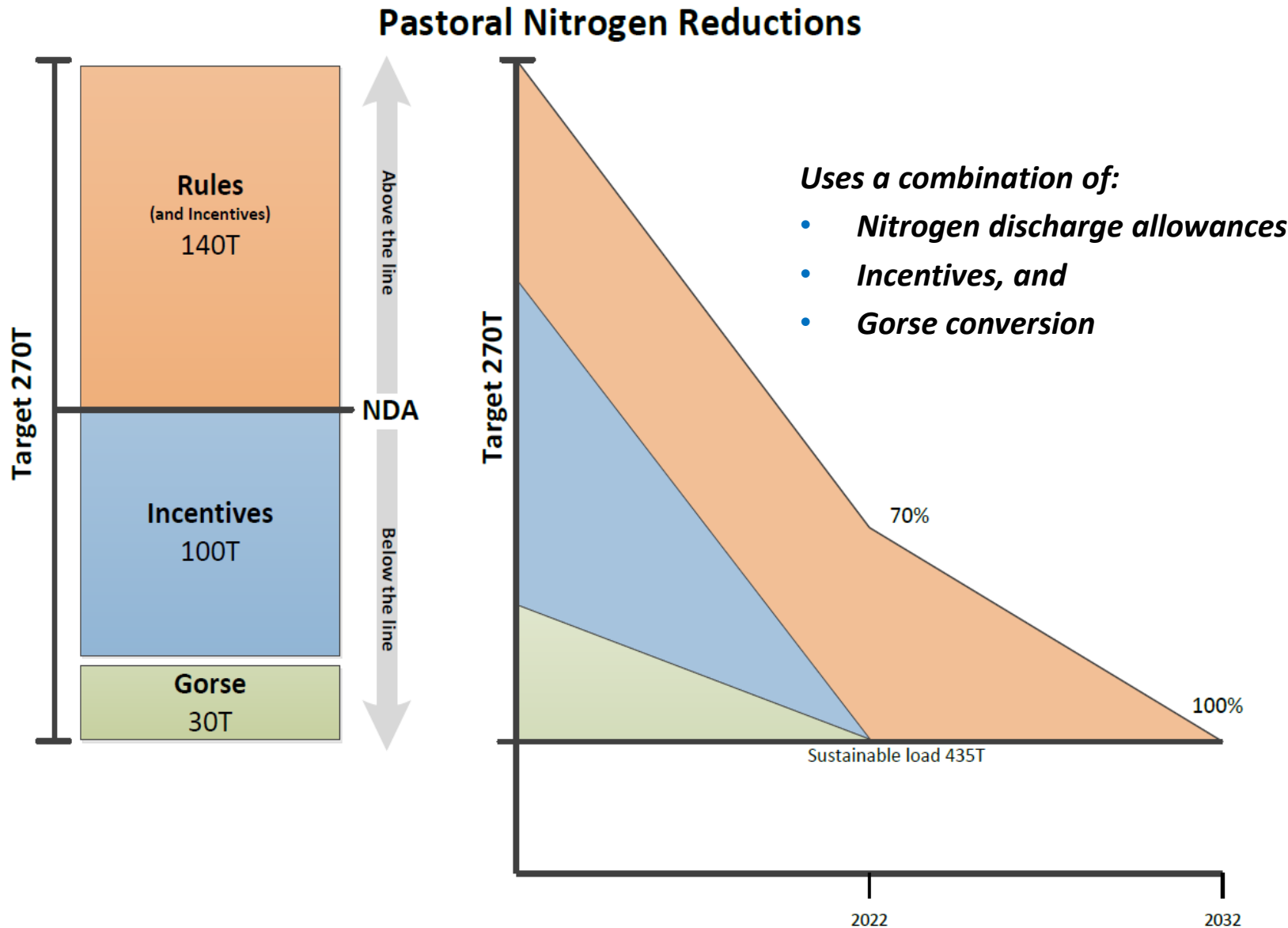
Incentives

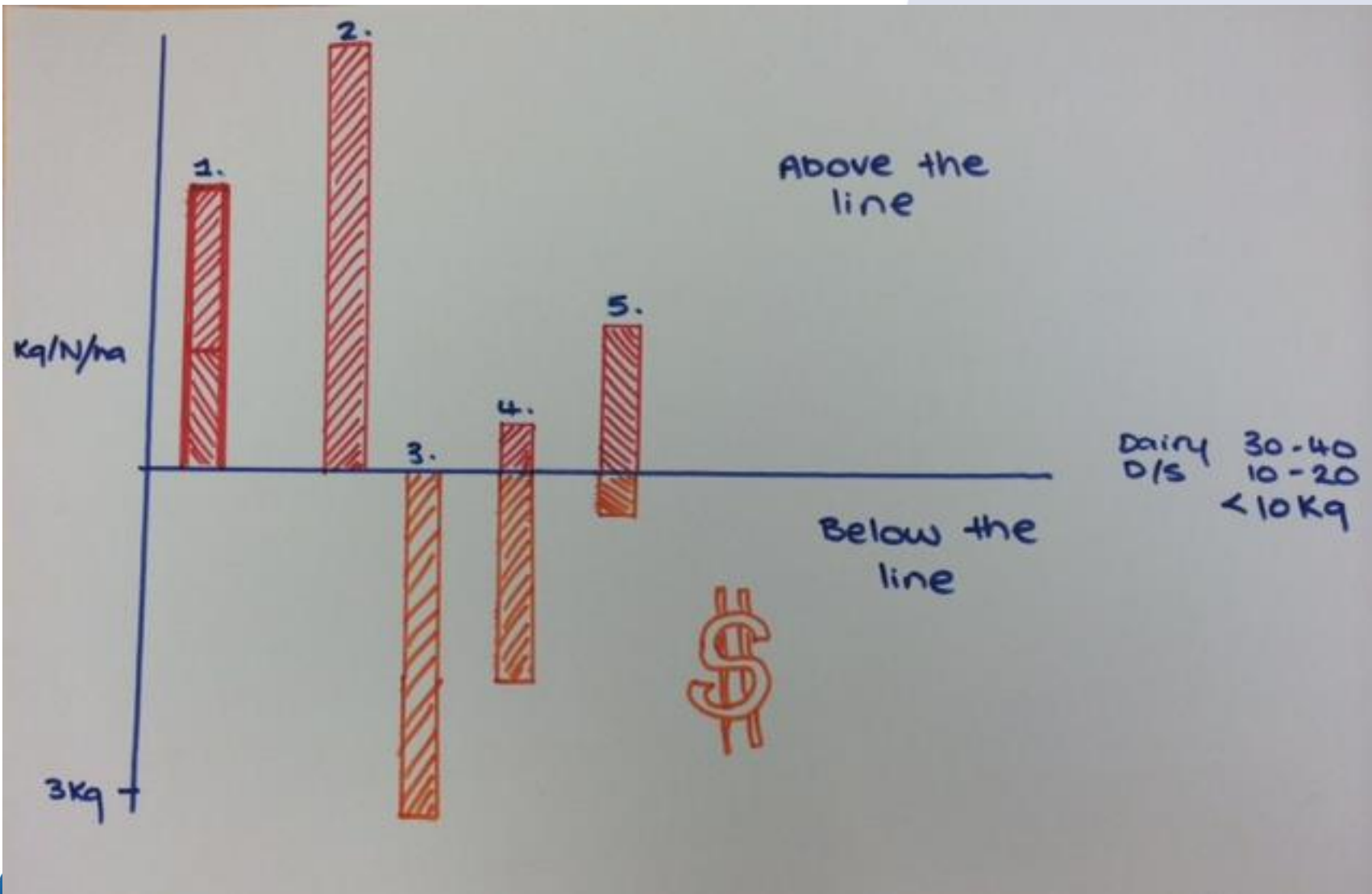
Land use Change

- Ōkāreka
- Rotoehu
- Rotorua
- Rerewhakaaitu



Approved approach





Delivery

5-7 member Board

Purchase 100 tonnes of N at lowest cost

In perpetuity

Legally secured



Low N land use solutions

\$3.3 million dollars

