



# Lake Rotorua Nutrient Management

## Primary Producers Collective 7 March 2016



Bay of Plenty Regional Council, Rotorua Lakes Council and Te Arawa Lakes Trust.  
*Working as one to protect our lakes with funding assistance from the Ministry for the Environment.*

#love our lakes  
[rotorualakes.co.nz](http://rotorualakes.co.nz)

# Integrated framework

<b>755 tN</b> Entering lake at steady state (ROTAN 2011)	<b>320 tN</b> Reduction target	<b>240 tN</b> From pastoral sector	<b>140 tN</b> Rules	<b>44 tN</b> Drystock	<b>17.2% of</b> Drystock load	
				<b>96 tN</b> Dairy	<b>35.3% of</b> Dairy load	
			<b>100 tN</b> Incentives		<b>71.4% of</b> Dairy and Drystock reductions	
		<b>30 tN</b> Gorse				
		<b>50 tN</b> Engineering solutions				
		<b>435 tN</b> Sustainable load				

# What is allocation?

How the available nitrogen is divided up across the catchment



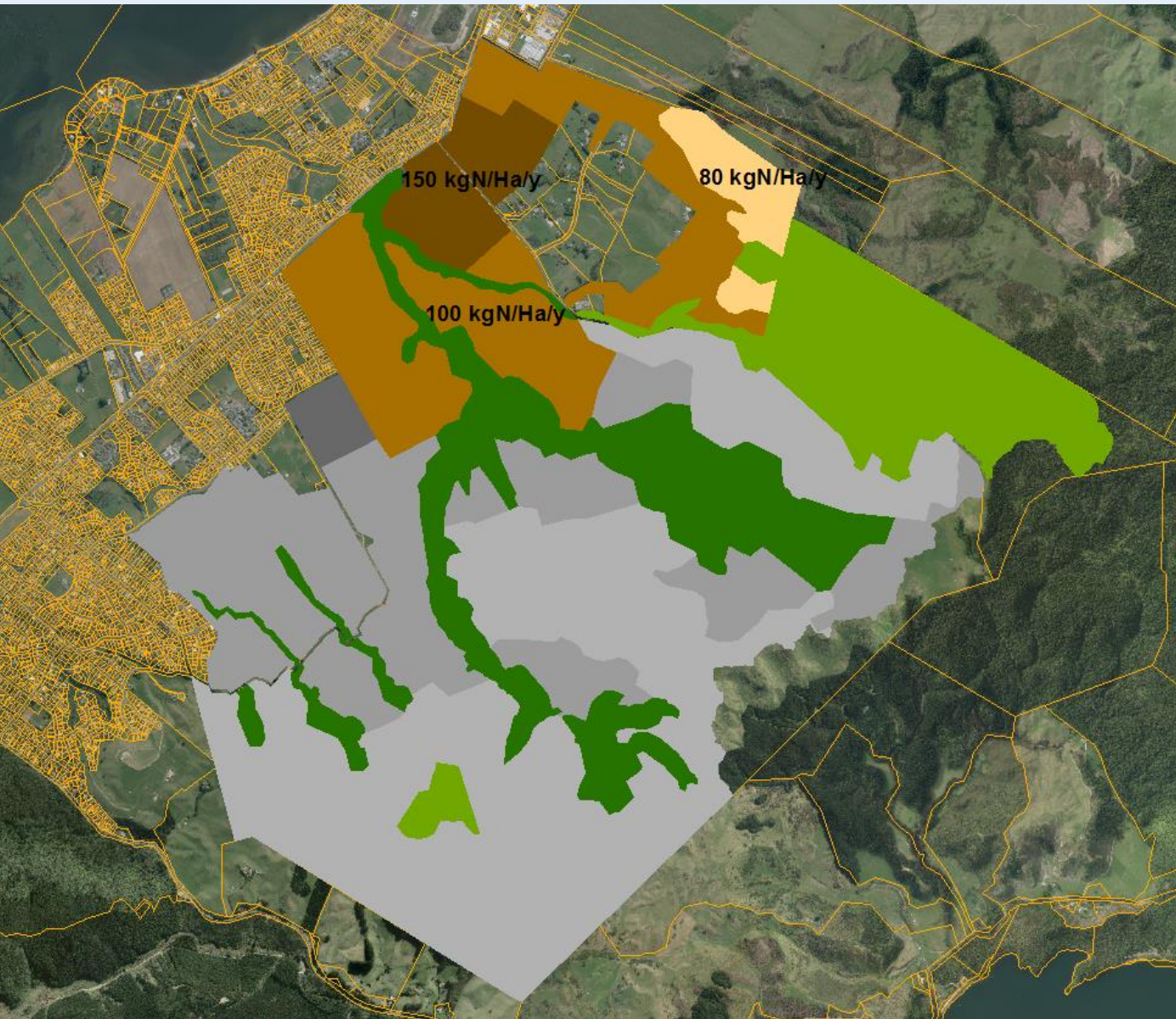
# What went into the allocation decision?

Key discussion point for StAG, Council  
Multiple options, sub-options considered  
Principles from the Integrated Framework  
Economic analysis to consider best option  
Benchmark information for the catchment

*Sector averages with ranges*



# Spatial units



## Block

- OVERSEER unit
- Allocation unit

## Sector

- Defines pNDA allocation formula

## Property

- Common management
- Compliance

# In the Proposed Rules

- Methodology to change Benchmark into Nutrient Discharge Allowance
- Schedule LR One
- Defines standard reduction, ranges, process for how it works

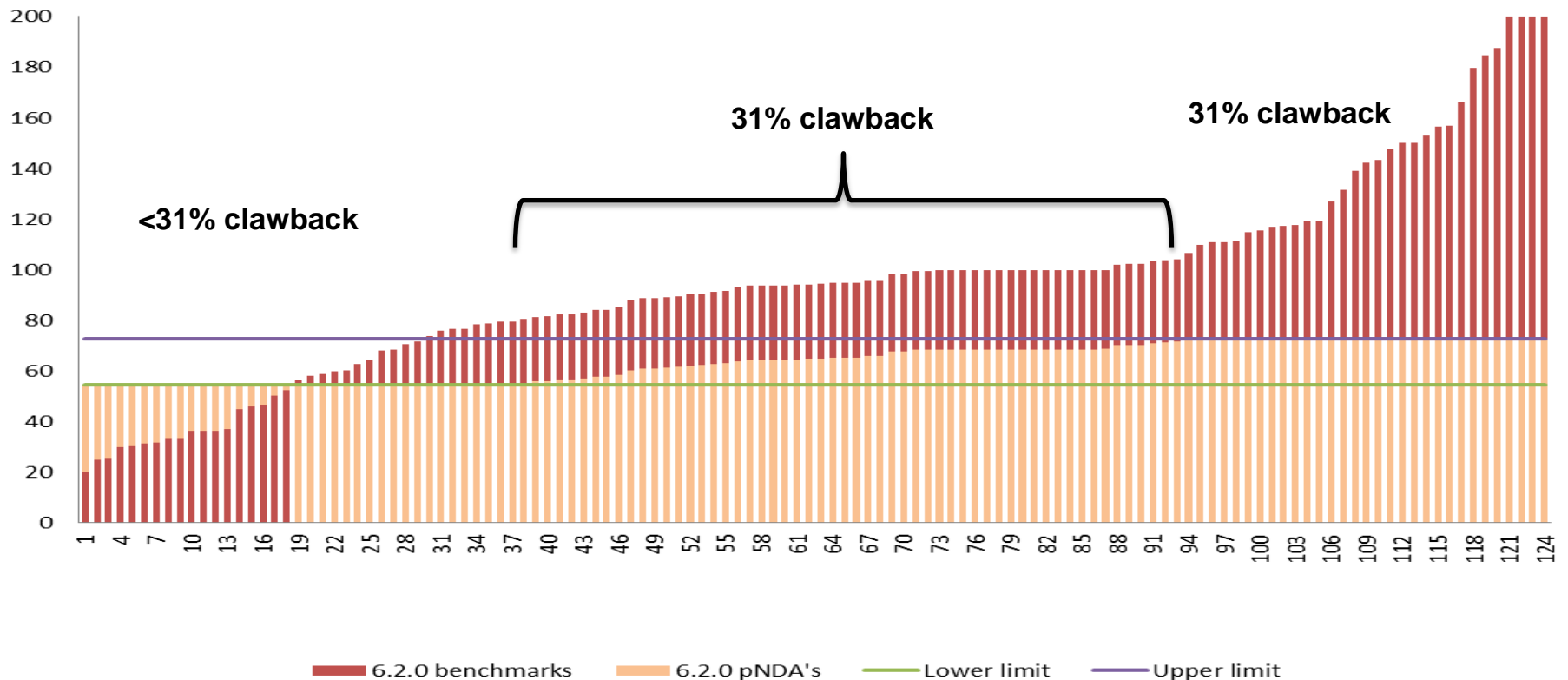


# Simply...

- From the benchmark
- Standard reduction applied %
  - Dairy 31.3%
  - Drystock 20%
- In range? - finish
- Above the range? - move to top of range
- Below range? – move to bottom of range

# Dairy sector allocation

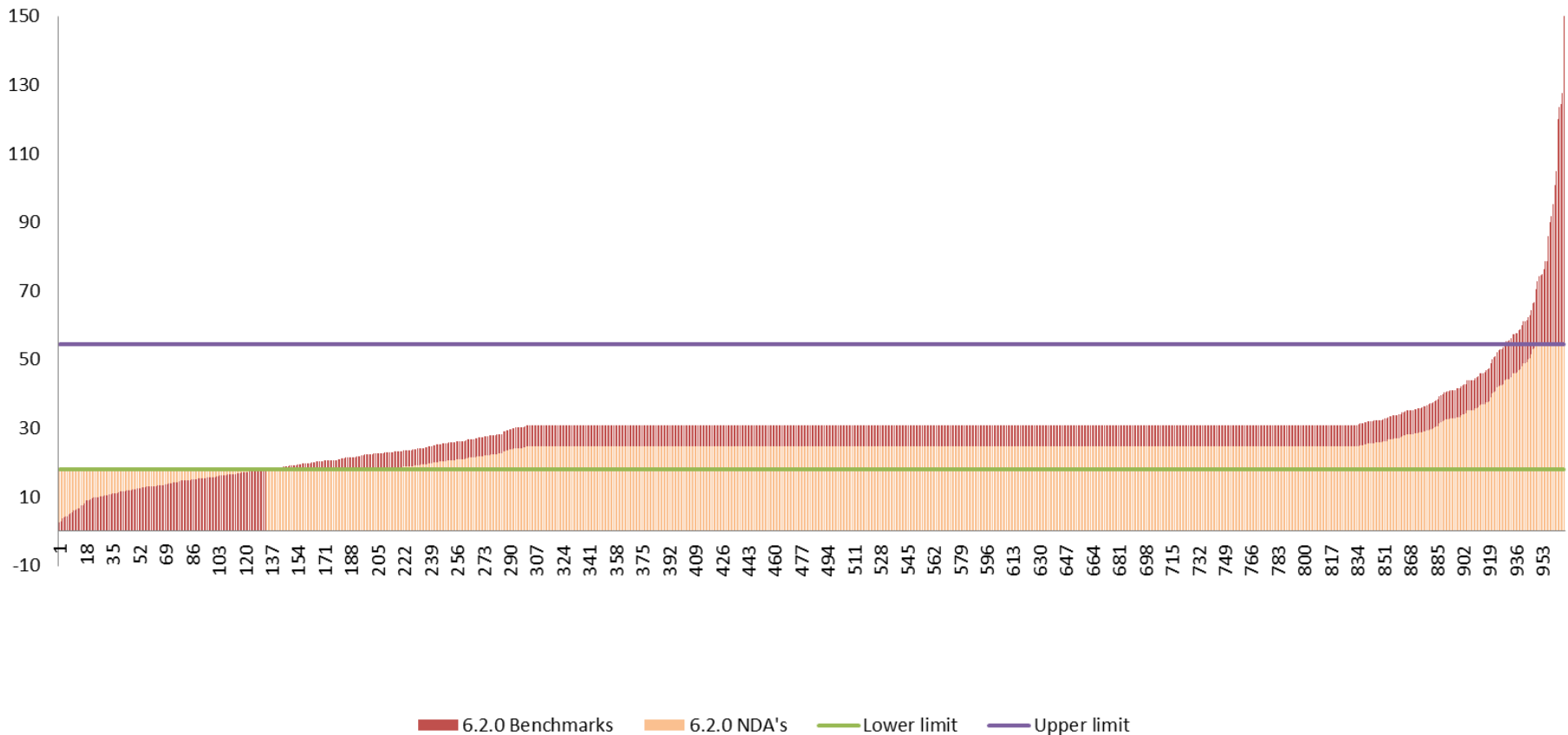
- Reduce block discharge by 31.3% but if > 72.8 then 72.8. If < 54.6 then 54.6
- Reductions from the top subsidise bottom blocks





# Drystock sector allocation

- Reduce block discharge by 20% but if > 54.6 then 54.6. If < 18 then 18
- Reductions from the top subsidise bottom blocks



# What about non-benchmarked land?

- Non-benchmarked land gets the average benchmark for the sector then pNDA formula applied

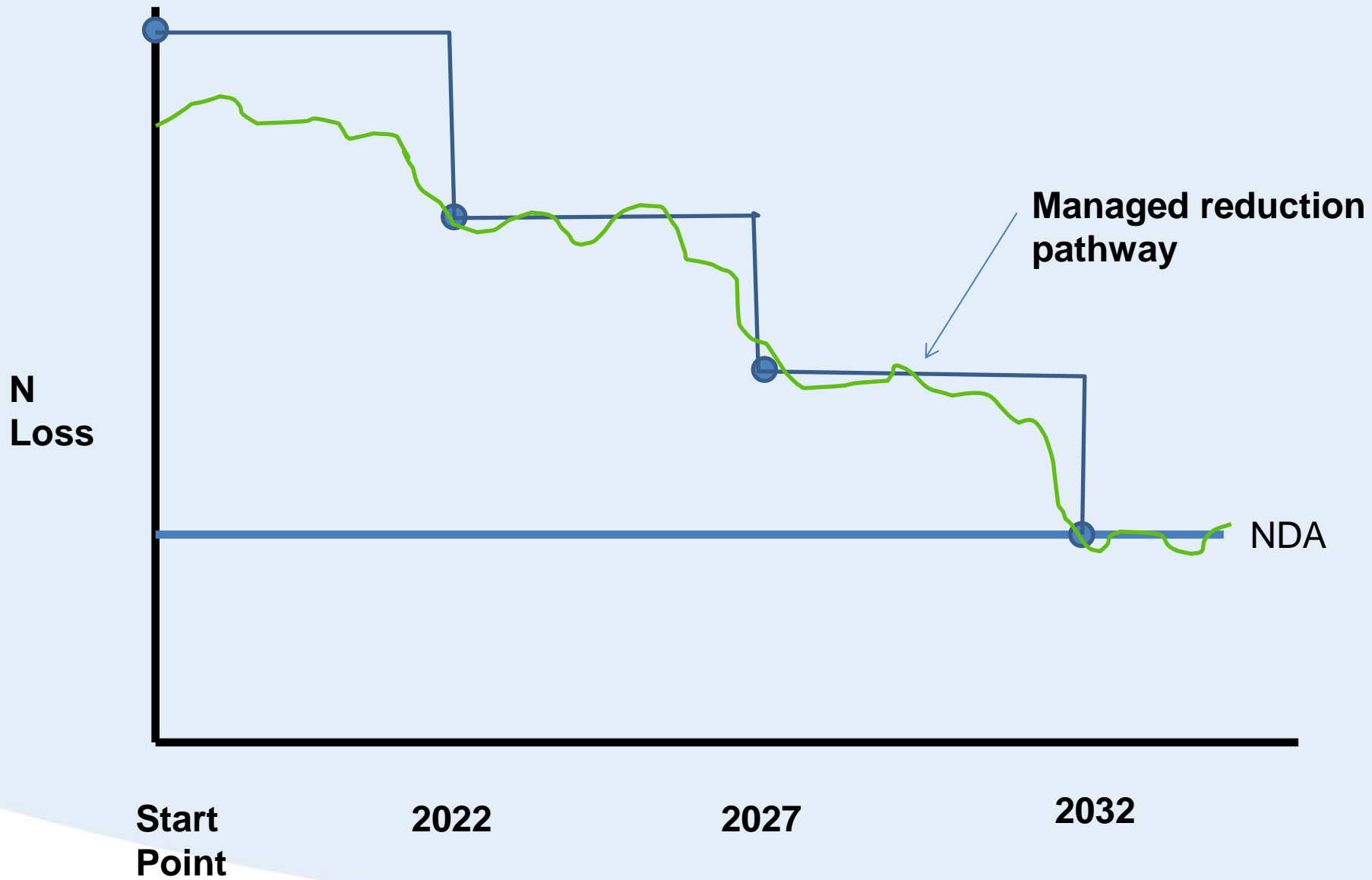
Sector	Benchmarked		Non-benchmarked		
	Area	Average loss	Area	Average loss	pNDA
Dairy	4701	99.7	299	99.7	68.5
Drystock	11688.39	30.9	4704	30.9	24.7
Forestry	6851	2.5	2300	2.5	2.5
Bush	7982	3.0	2012	3.0	3
Grazed tr	830	8.2	N/A	N/A	
Houses	105	46.7	303	1 house per polygon plus cultivated garden	1 house per polygon plus cultivated garden

# When does the NDA come into play?

Pastoral properties need to be at the NDA in 2032

Nitrogen Management Plans in 5 year blocks  
NMP details the farm system and pathway of reductions (actions)





# What needs to be achieved by when?

For 2017 start	For 2022 start
<ul style="list-style-type: none"><li>• 2022 – 31%</li><li>• 2027 – 66%</li><li>• 2032 – 100%</li></ul>	<ul style="list-style-type: none"><li>• 2027 – 50%</li><li>• 2032 – 100%</li></ul>

15 years or 10 years to get to NDA

