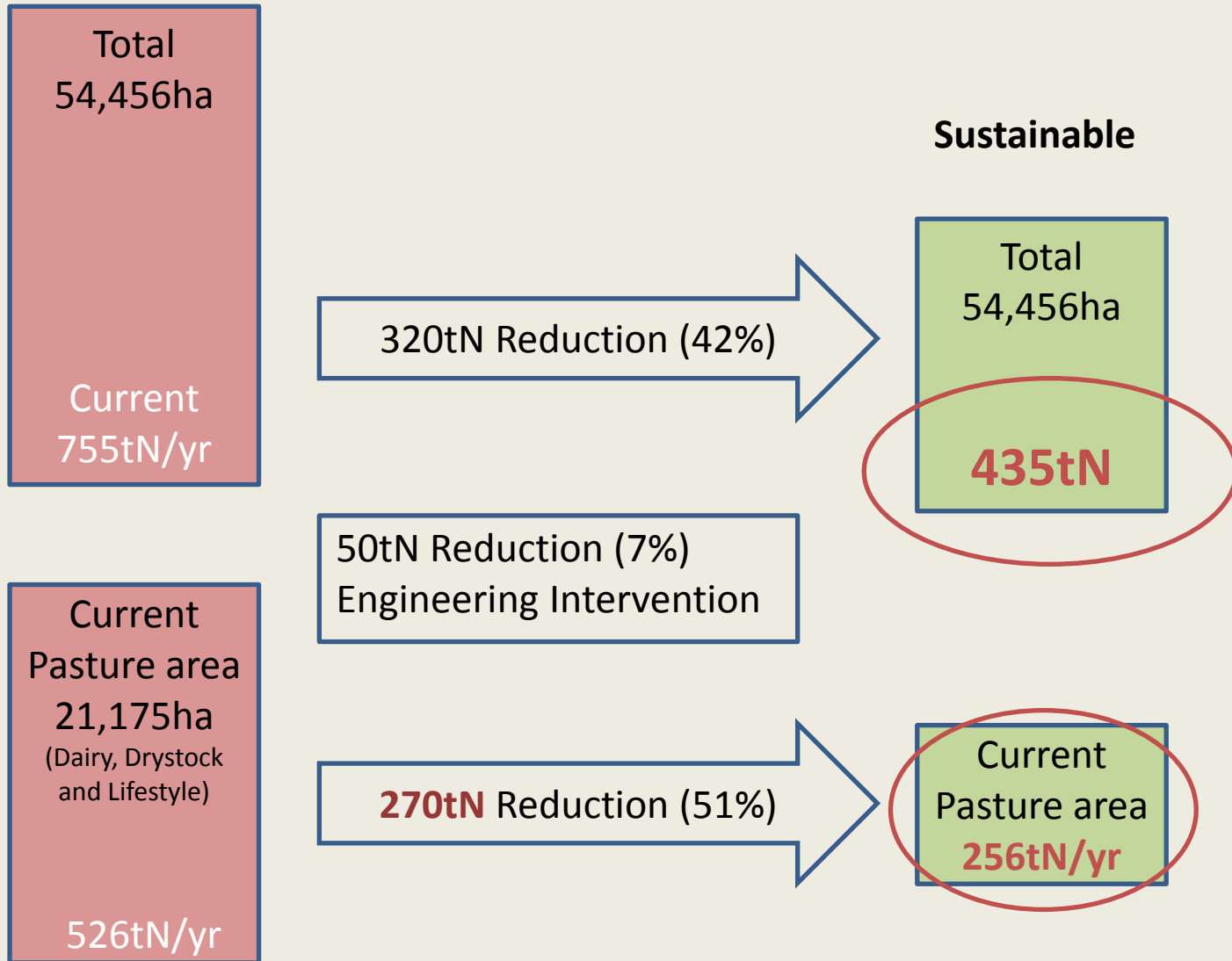# We need to think about allocation

Why we need to allocate?
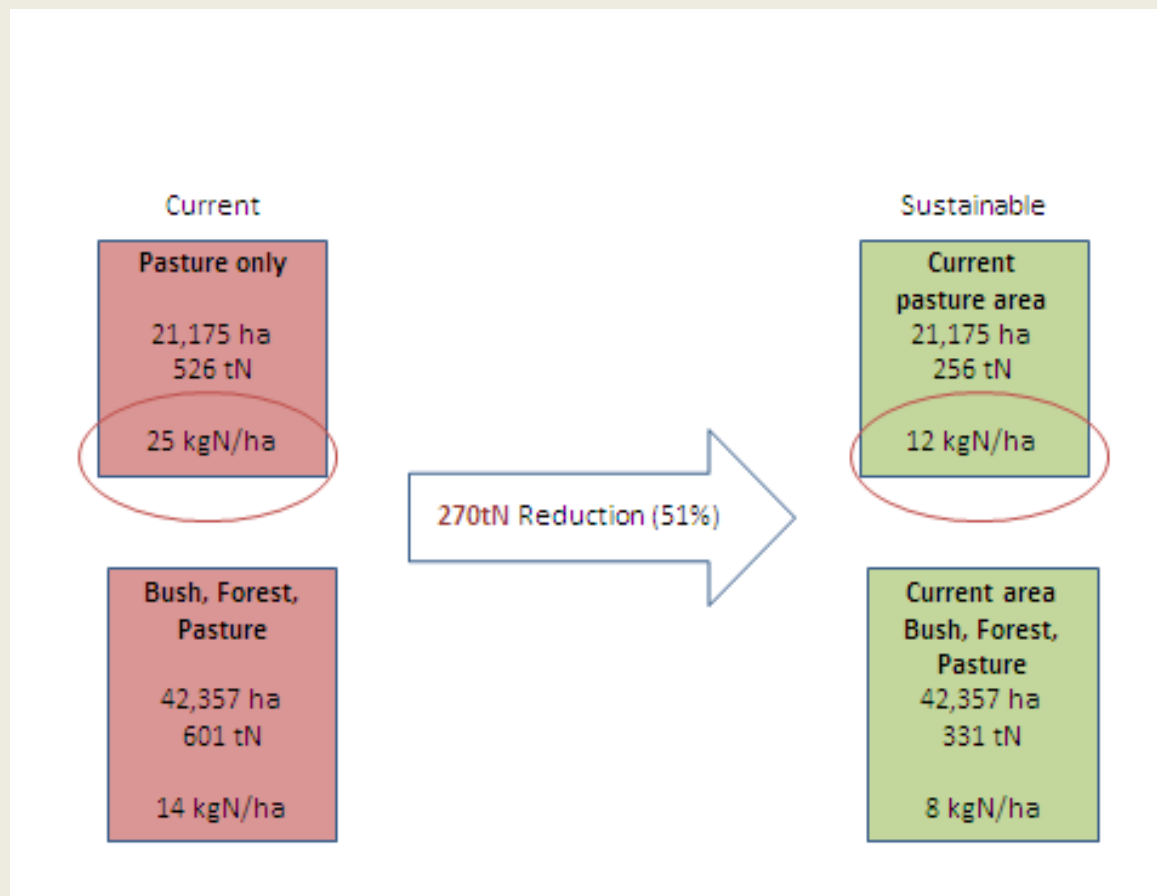
What are the options to allocate?

How allocation might look in Rotorua catchment?

We have a Target = 435tN/y

Total
54,456ha

Current
755tN/yr

Sustainable

Total
54,456ha

435tN

320tN Reduction (42%)

50tN Reduction (7%)
Engineering Intervention

Current
Pasture area
21,175ha
(Dairy, Drystock
and Lifestyle)

526tN/yr

270tN Reduction (51%)

Current
Pasture area
256tN/yr

Areas and N loss levels from ROTAN (NIWA, 2011)

Policy decision has to be made on what existing uses will qualify for allocation

Areas and N loss levels from ROTAN (NIWA, 2011)

We need to allocate 256tN across pastoral land

There will be challenges and opportunities

- Policy debate
- Tools available
- Scientific information
- Advances in mitigation
- Complexities of rule and incentives design

But the fundamental challenge of allocation remains

There are a number of options to allocate

- Grandparenting
- Averaging
- Land Use Capability or N Leaching vulnerability
- Outputs including profitability
- Variations / Hybrids / new

How could allocation options look in the Rotorua catchment?

Grandparenting is existing use at current discharge

Examples include Rule 11 (BoP) and Variation 5 (Waikato)

Grandparenting will not achieve the required reduction

Possible variation (Warren)

Averaging is 256 tonnes equally split over the pastoral catchment of 21,175ha

Averaging could mean rolling average over set number of years to allow for variances in production, climate and farming operations.

Land Use Capability encourages land use at its natural carrying capacity

Land use capability is a classification of land according to its capability for long-term production.

	LUC Class	Arable cropping suitability†	Pastoral grazing suitability	Production forestry suitability	General suitability
	1	High	High	High	
	2				Multiple use land
	3				
	4	Low			
	5				Pastoral or forestry land
	6				
	7	Unsuitable	Low	Low	
	8		Unsuitable	Unsuitable	Conservation land

Increasing limitations to use (left axis, downward arrow)

Decreasing versatility of use (right axis, downward arrow)

Horizons have adopted a Land Use Capability (LUC) method of allocation

	LUC 1	LUC 2	LUC 3	LUC 4	LUC 5	LUC 6	LUC 7	LUC 8
Year 1	32	29	22	16	13	10	6	2
Year 5	27	25	21	16	13	10	6	2
Year 10	26	22	19	14	13	10	6	2
Year 20	25	21	18	13	12	10	6	2

Each property has a unique and fixed mix of LUC classes

Is Land Use Capability based allocation relevant to the Rotorua Catchment?

Allocation Scenarios - Warren

They are just that…..*possible* scenarios

Purpose is to starting our thinking about how allocation could look in the Rotorua catchment

Next Steps……

- Report back to Group on ideas, alternatives and preferred approaches
- Further information
- More worked examples

Next Month – Allocation Principles

eg.   ROTAN = 21,175ha pasture

LUC database = 19,500ha pasture
(and what's in the 1136ha of Class 0 land?)

RDC database also at variance with ROTAN / BOPRC database