

Lake Rotorua Gorse Conversion Project



Proud Partners



With funding from



Gorse and Nitrogen

- SCION research by Magesan, G. and Wang, H. (2008)
- Confirmed that gorse is a significant contributor of nitrate leaching to groundwater.
- Study conducted during 2006 and 2007
- Results of the two years at two sites - 59, 64, 36 and 40 Kg of N leached / ha
- This investigation derived a generic nitrate leaching of 50 kg N ha



Proud Partners



With funding from



Gorse Mapping

- 2007 mapping carried out by an assessment of aerial photography assessed 870ha of Gorse in catchment
- 2015 Gorse mapped using satellite imagery assessed 778ha of Gorse in catchment
- Digitised areas of gorse ≥ 1 ha with $\geq 75\%$ cover by interpreting differences between SPOT6 spring vs. SPOTMaps summer imagery (looking for flowering gorse in the spring imagery)

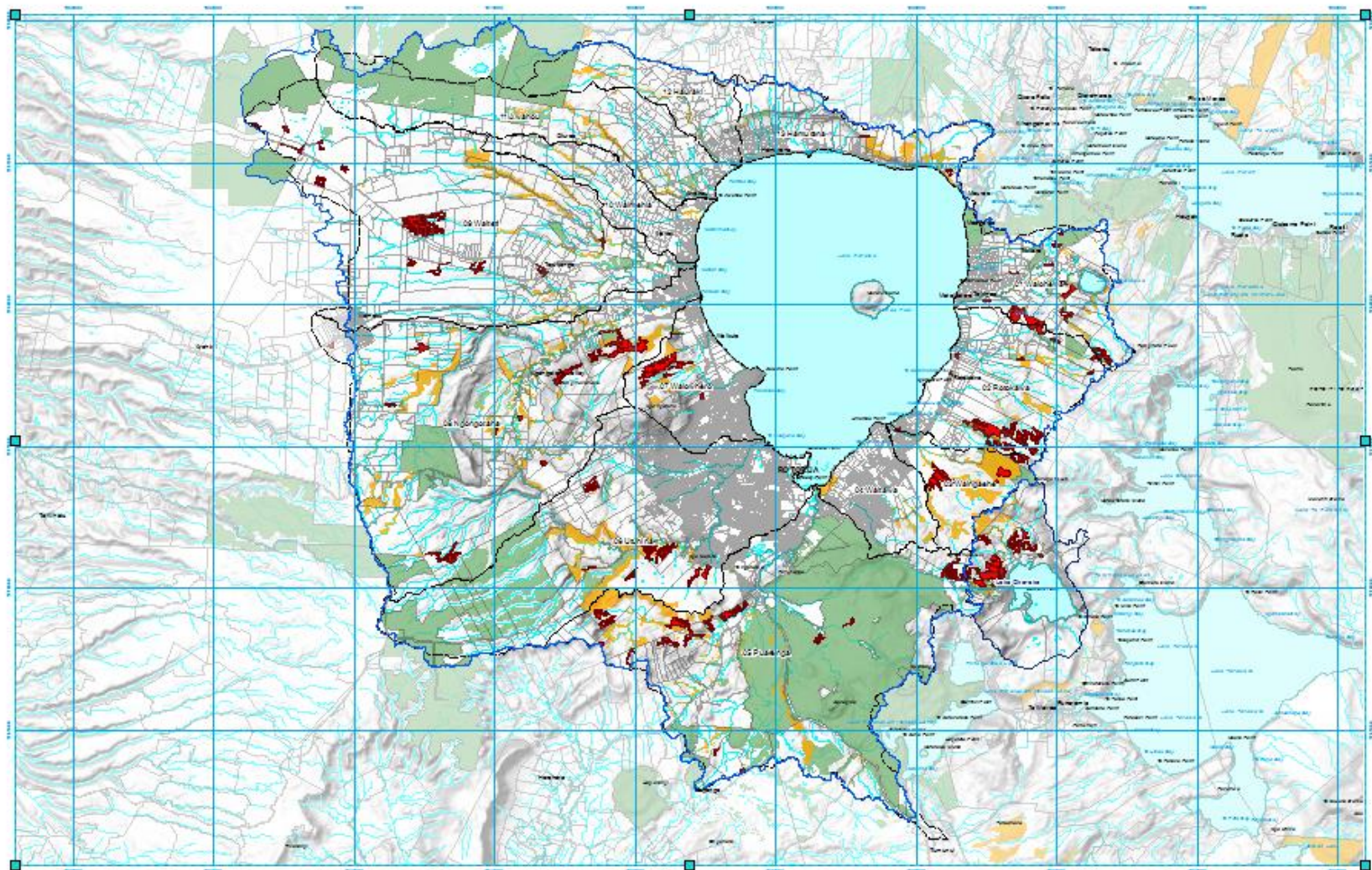


Proud Partners



With funding from





magnetic north-01

UNAPGRADED GORSE
 UNREGISTERED GORSE
 REGISTERED GORSE
 FORESTRY

Draft_10pt

Scale 1:50000



Legend

- Rotorua Groundwater Catchment
- Lakes Programme Sub-Catchment Areas
- Lake Okareka Surface Drainage
- Ungrazed Gorse (Landscape)
- Registered GP
- Forestry

Gorse in Rotorua
 Landscape Survey

Rotorua Lakes & Gorse Mapping 02/01/10
 THIS DOCUMENT



Proud Partners



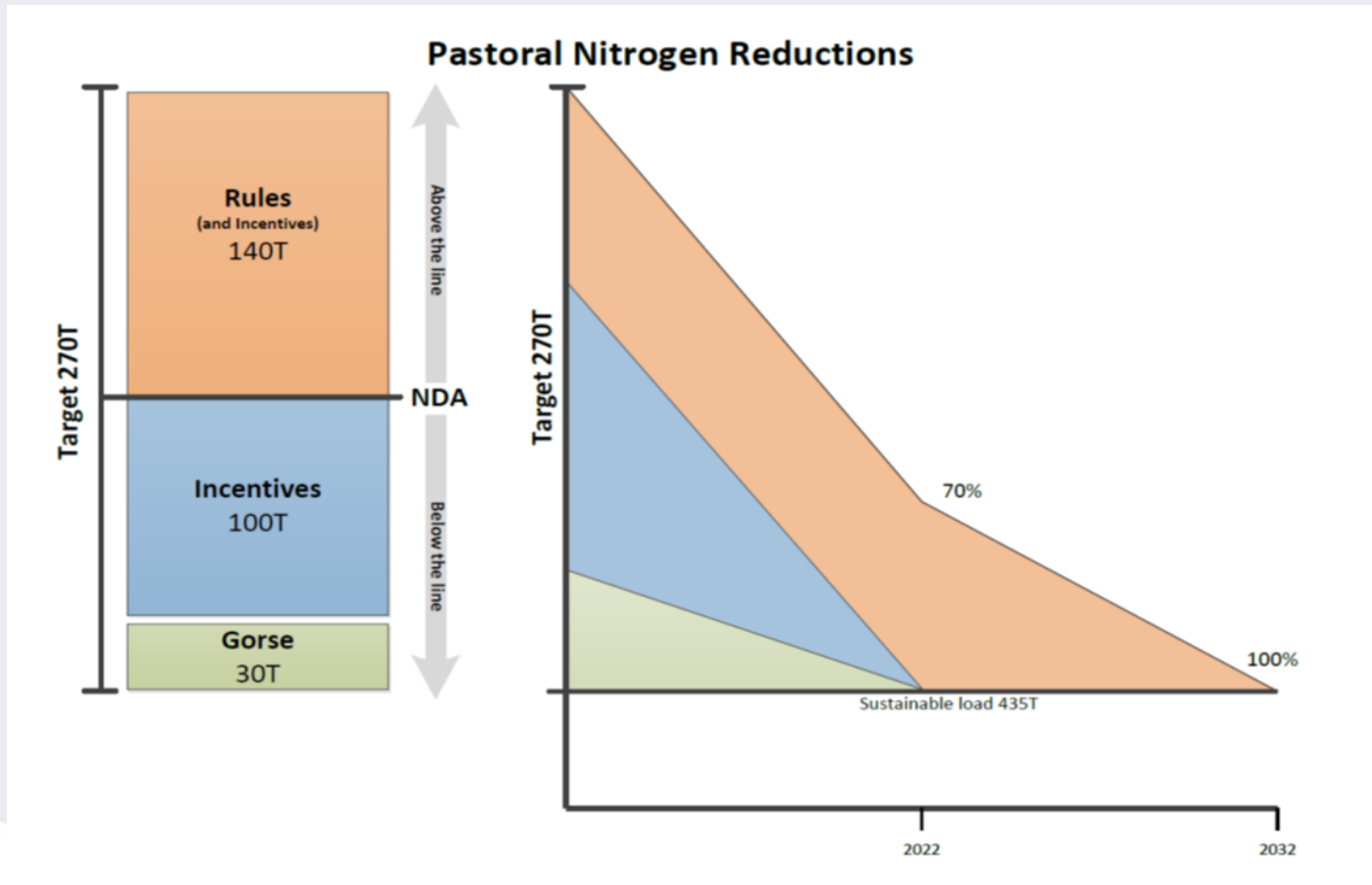
With funding from



Gorse/Land Use within the Rotorua Catchment

Land use	Area/Ha	Kg/N
Forestry	49	1,715
Environmental Programme	267	9,345
Farm Plan	182	6,370
Balance	280	9,800
Total	778	27,230

Rules and Incentives context



Funding & budgets

- Funded through Rotorua Lakes Programme
- Up to \$4.5K per ha (budget based on average \$3K) – for establishment only.
- Up to \$2K available for independent legal/forestry advice



Proud Partners



With funding from



Criteria

- Must have a high degree of certainty of removing or suppressing mature gorse permanently.
- Land must be within the Lake Rotorua groundwater catchment and within the Bay of Plenty region
- Changes must be to a N leaching rate equivalent to or less than forestry. (excludes legume tree species)
- Net P losses must not exceed levels prior to conversion.
- Gorse conversions secured by 999 year agreements



Proud Partners



With funding from



Other Considerations

- Tie ins with the Incentives Programme for possible pasture conversion
- Small blocks of gorse – managed reversion to native or managed high value species
- Ongoing mapping to establish success of programme
- AGS (Afforestation Grant Scheme)
- Carbon credits



Proud Partners



With funding from



Questions ?



Proud Partners



With funding from

