

# CNI Iwi Holdings Ltd

**Corporate Trustee** for

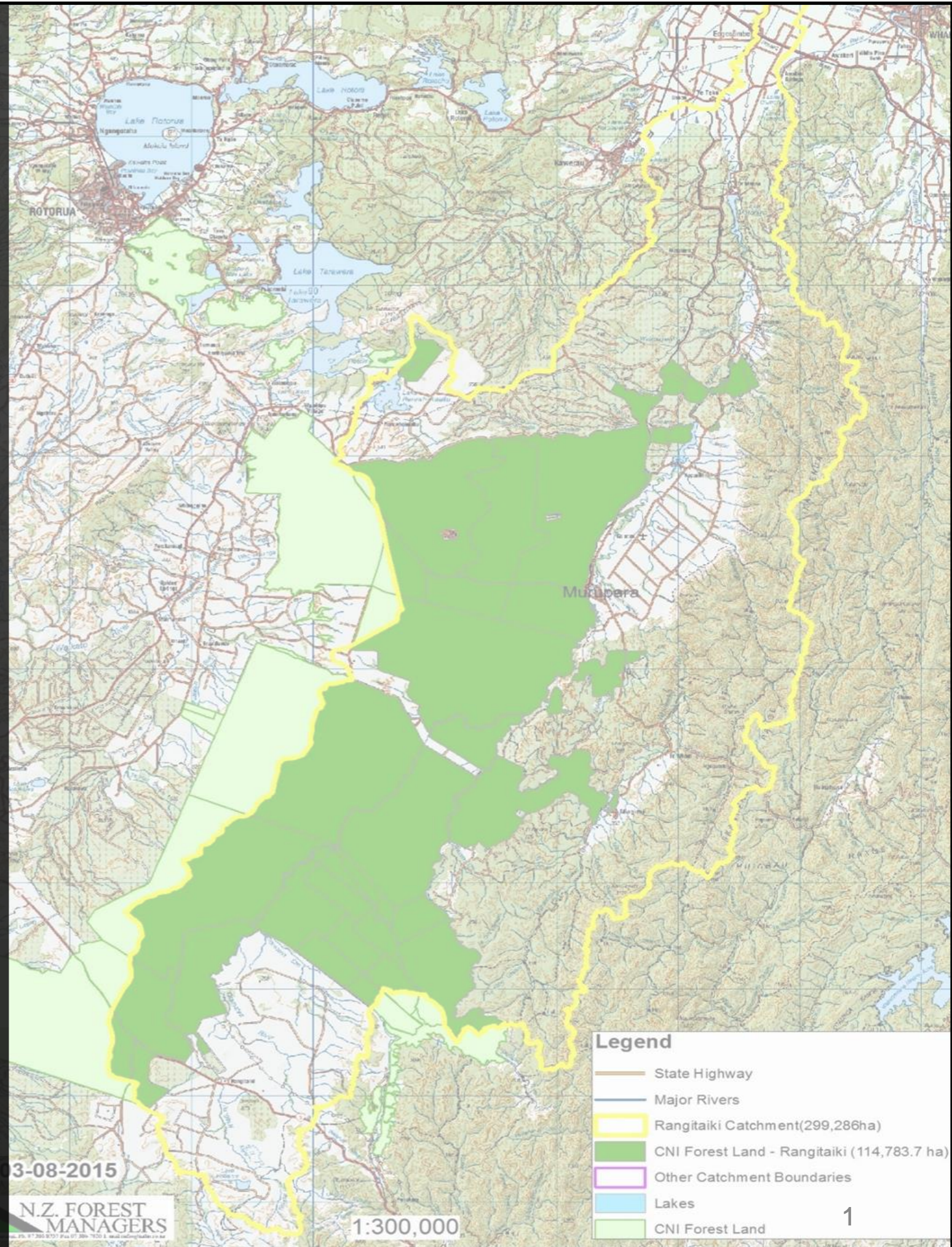
# the CNI Iwi Collective

Toi tu te whenua....

Whatu ngarongaro te tangata...

People may come and go....

The land remains forever...





**1. CNIHL Context for interacting  
with Proposed Plan Change 10**

**2. Policy Development process**

3. Policy Development Logic



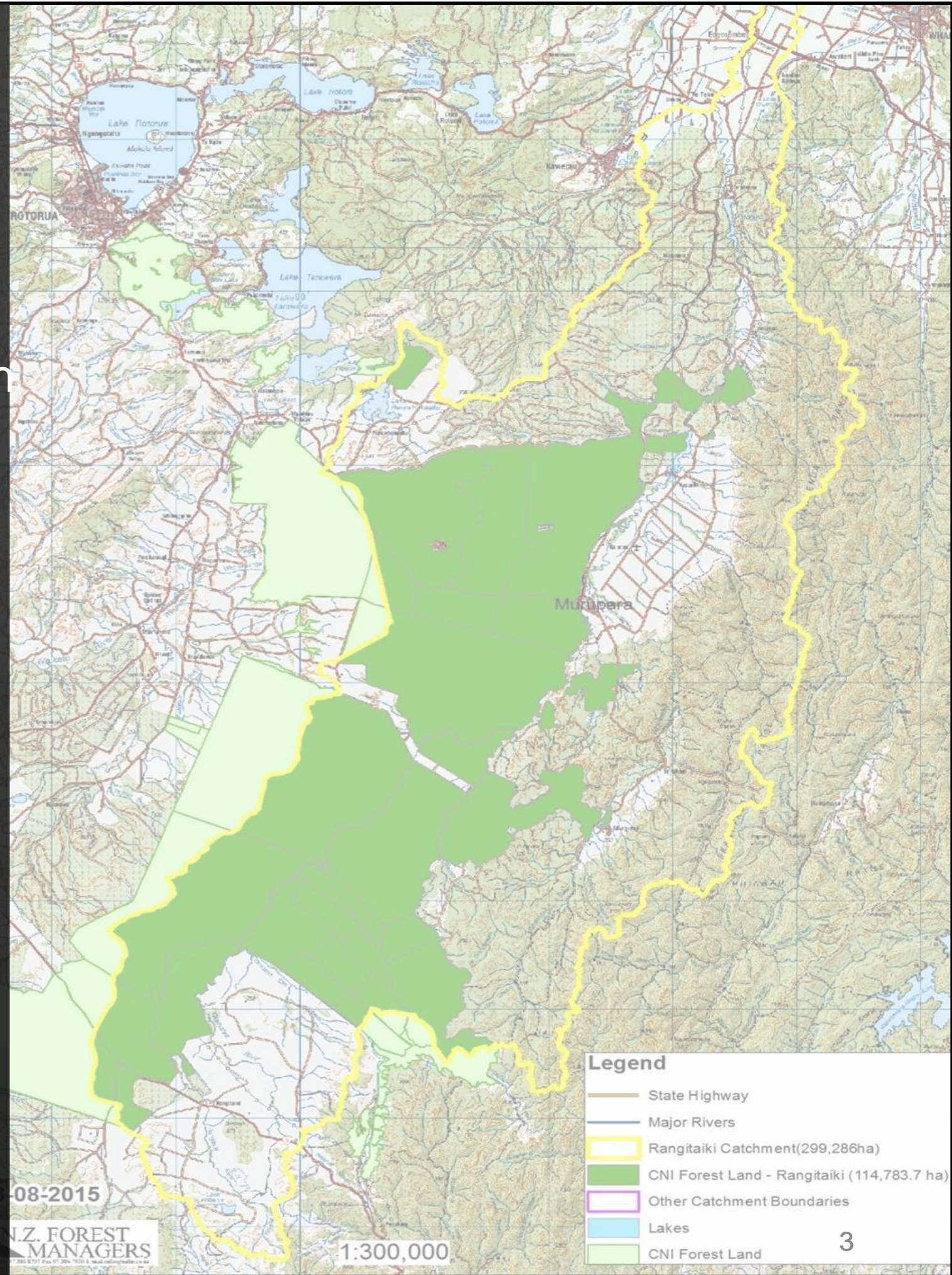
# Timeline

**1900's** land confiscated / acquired by the Crown through illegal means

**1980's – 2005** Crown and Iwi tried various approaches to work towards settlement

**2005** Iwi met to discuss a collective approach led by Te Ariki Tumu Te Heuheu

**2008** CNI Iwi Collective Deed of Settlement signed





# The Land

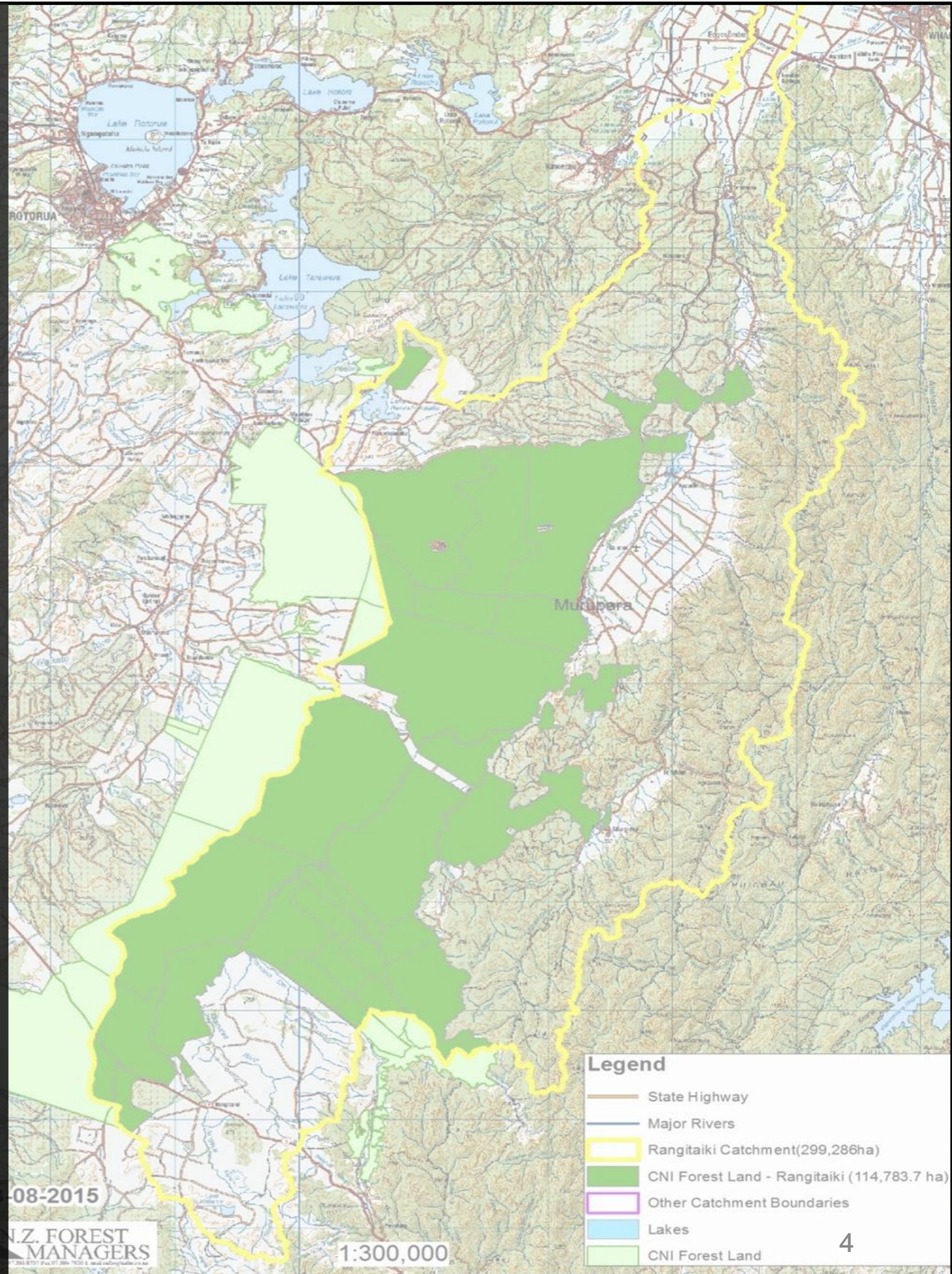
**June 2009** the 8 Iwi received 176,000 Ha of CNI Forest land

≈142,000 Ha  
in the Bay of Plenty

≈3,100 Ha  
in the Lake Rotorua  
Catchment

Land returned under Crown  
Forestry Licenses i.e. in  
forest for up to 35 years

CNI Iwi Holdings Limited



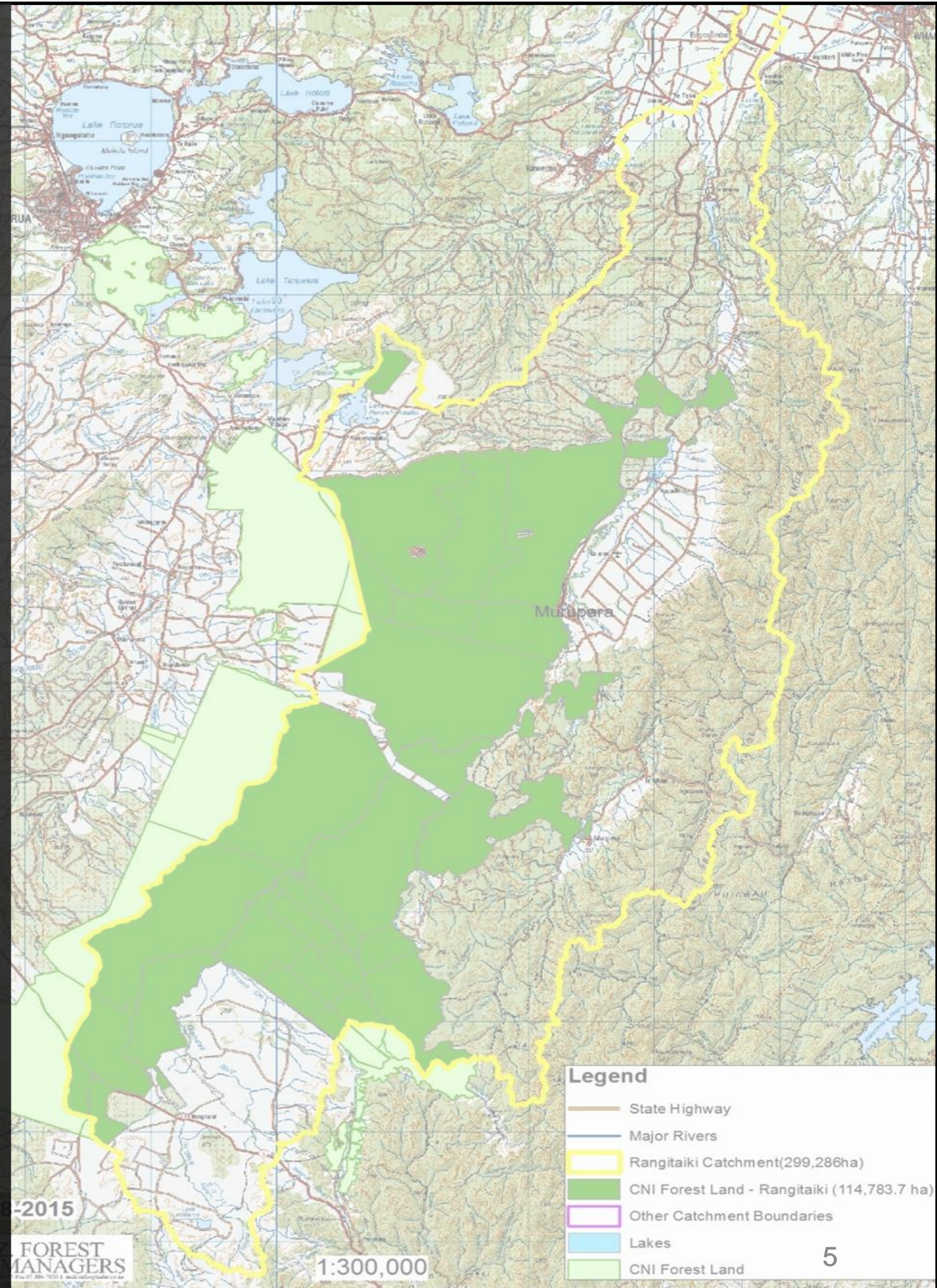


# The People

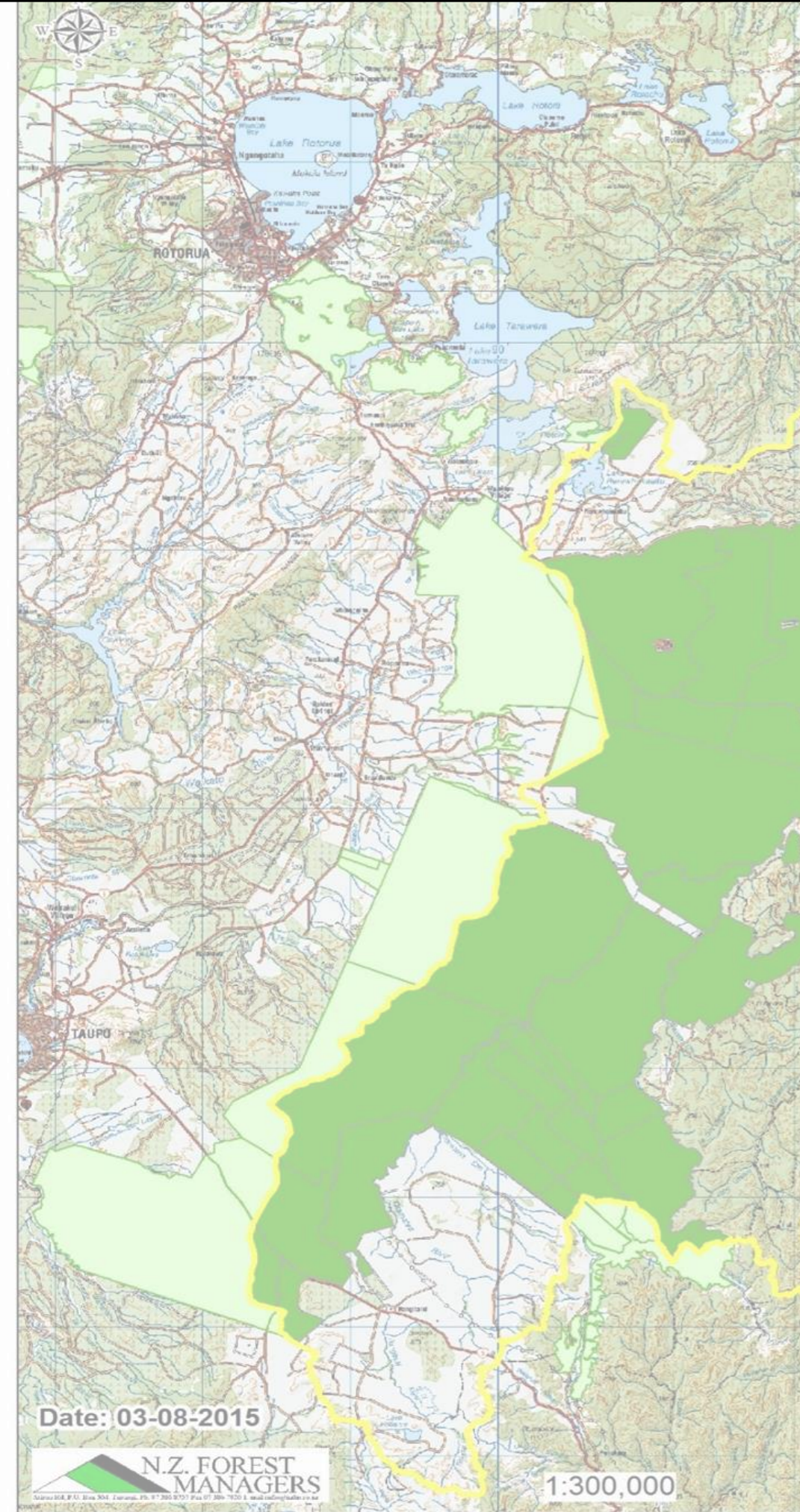
Ngāti Whare  
Ngāti Manawa  
Ngai Tūhoe  
Ngāti Tūwharetoa  
Ngāti Rangitihi  
Te Pūmāutanga o Te Arawa  
Raukawa  
Ngāti Whakaue

Collectively > 110,000  
people

CNI Iwi Holdings Limited







## CNI Iwi Holdings Ltd

CNIHL holds and manages the land until 2043

Governed by a Board of 16 Directors (2 directors per Iwi)

Formal engagement with CNIHL is through the Board.

Land management by wholly owned subsidiary  
CNI Iwi Land Management Ltd



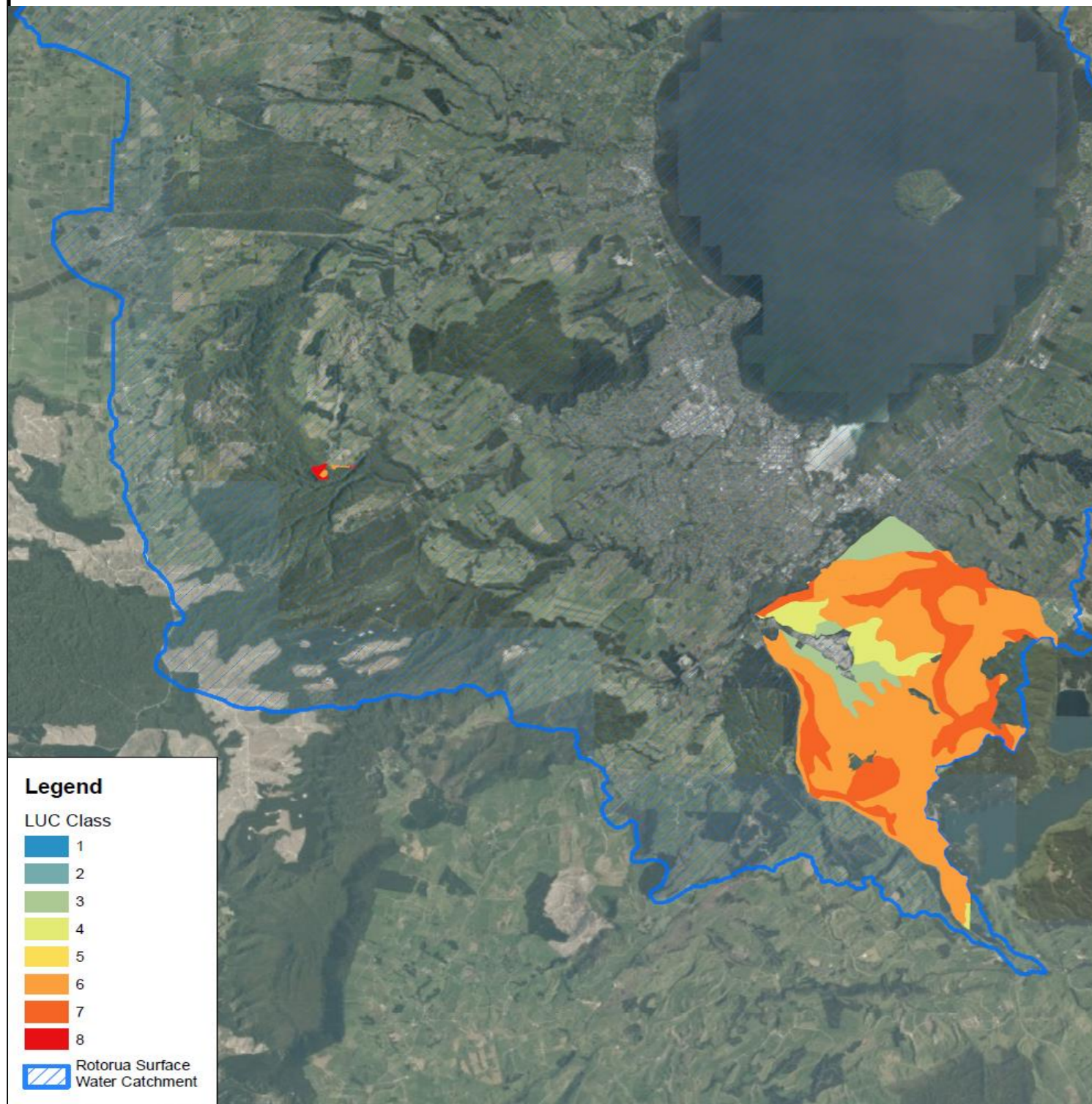
# Aspirations

Create a future for our people

where opportunities abound

*and we have*

a thriving, happy, prosperous community



Scale: 1:125,000 at A4

CNI Forest Land  
Rotorua Catchment

Date: 7/02/2017

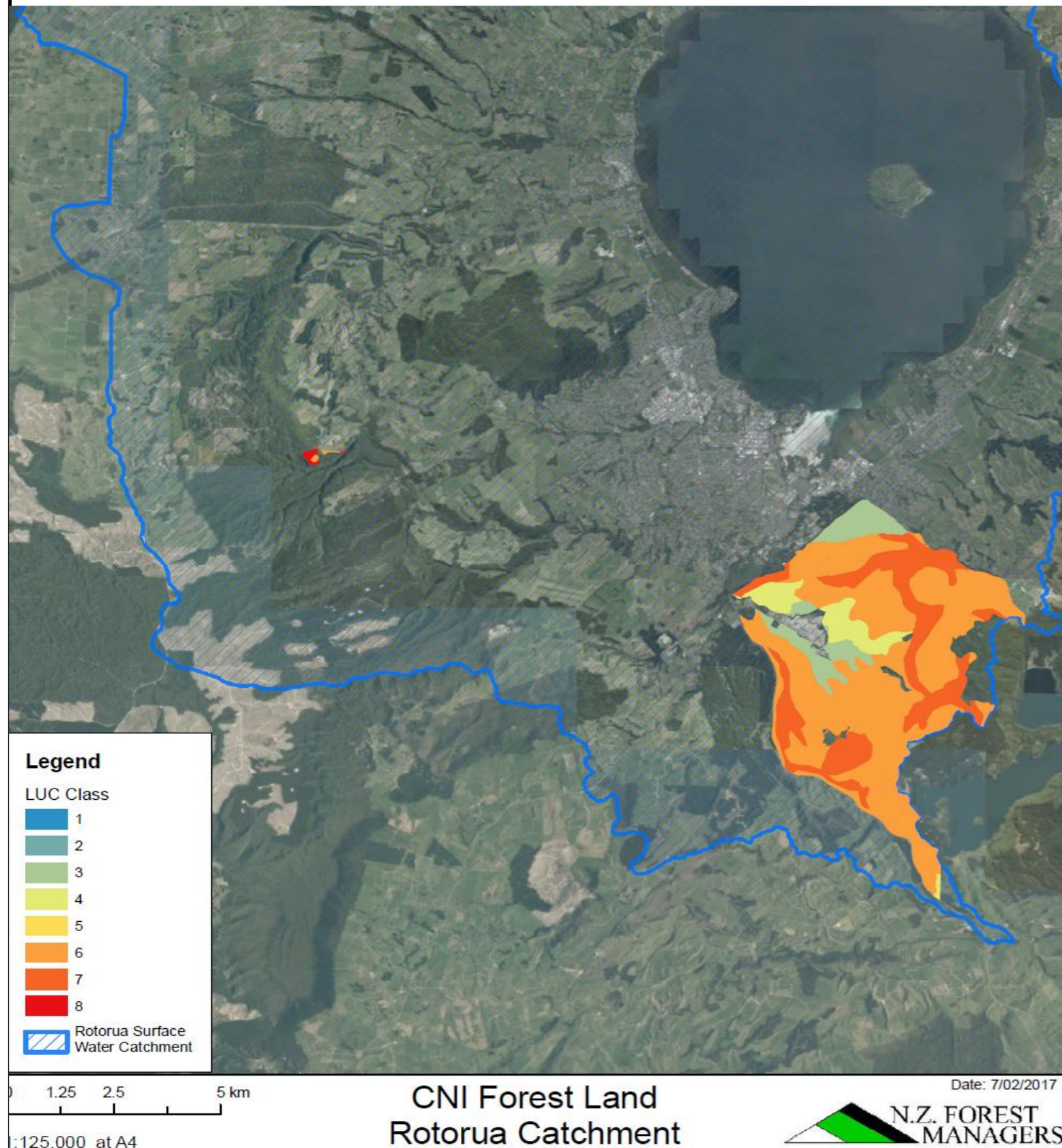




# Aspirations

To maximise wealth through operating a successful commercial business, respectful of tikanga and the environment

To manage the land and opportunities for current and future generations.

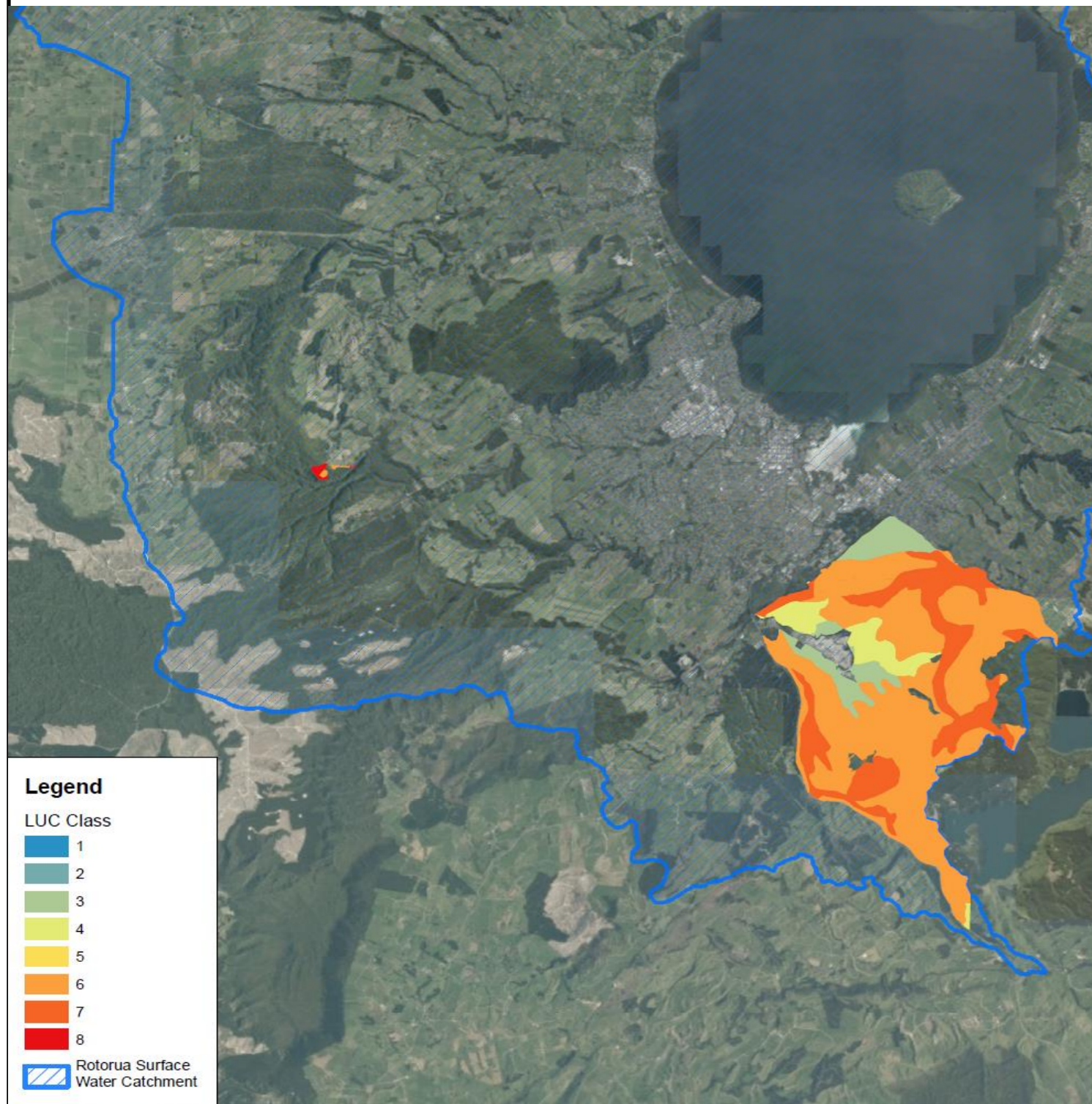




# Aspirations

Achieving best practice in  
all our dealings and  
**relationships**

Work with long term  
**partners**  
who can add value







# Challenges

Crown Forest Licenses for up to 35 years

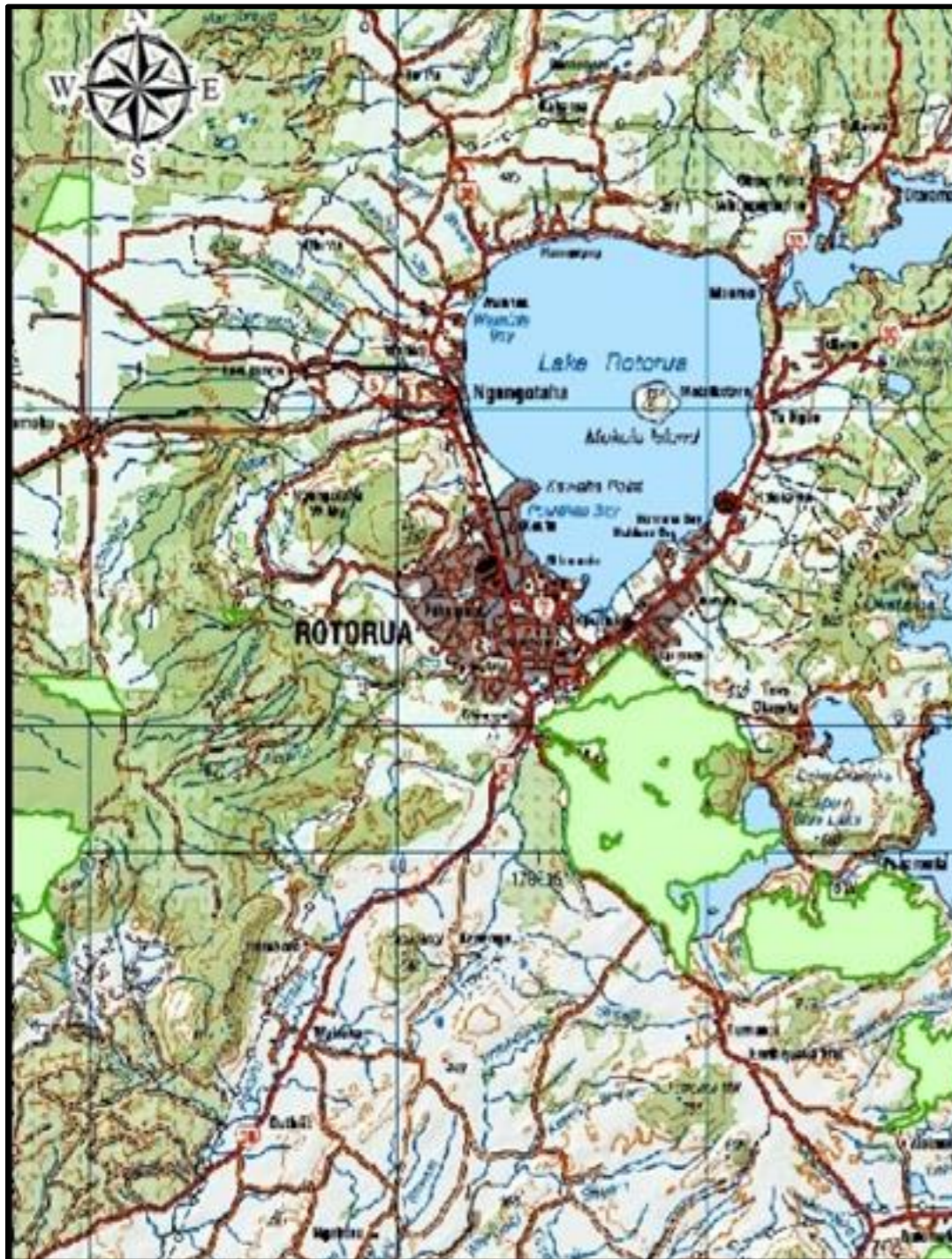
For wealth creation and stability we need to:

1. unlock the potential of the land
2. retain resources to be able to use it
  - Carbon
  - Water
  - Nutrients

PC 10 Effect on CNI 3000Ha >\$43m

- on lost optionality or
- cost of bought N.





## Challenges

- **1900's** land confiscated
- **2005** Rule 11 operative = “interim measure”
- **2008** CNI Iwi Collective Deed of Settlement signed





## 1. CNIHL Context for interacting with Proposed Plan Change 10

- Settlement Land
- CNI own the land not the trees

## 2. Policy Development process

- CNI 6% of catchment, not at the table
- Plan opportunity cost \$43m
- Rule 11 was interim
- Method 41 develop new action plan with all stakeholders
- CNI is subsidising others

## 3. Policy Development Logic



# 1. CNIHL Context for interacting with Proposed Plan Change 10

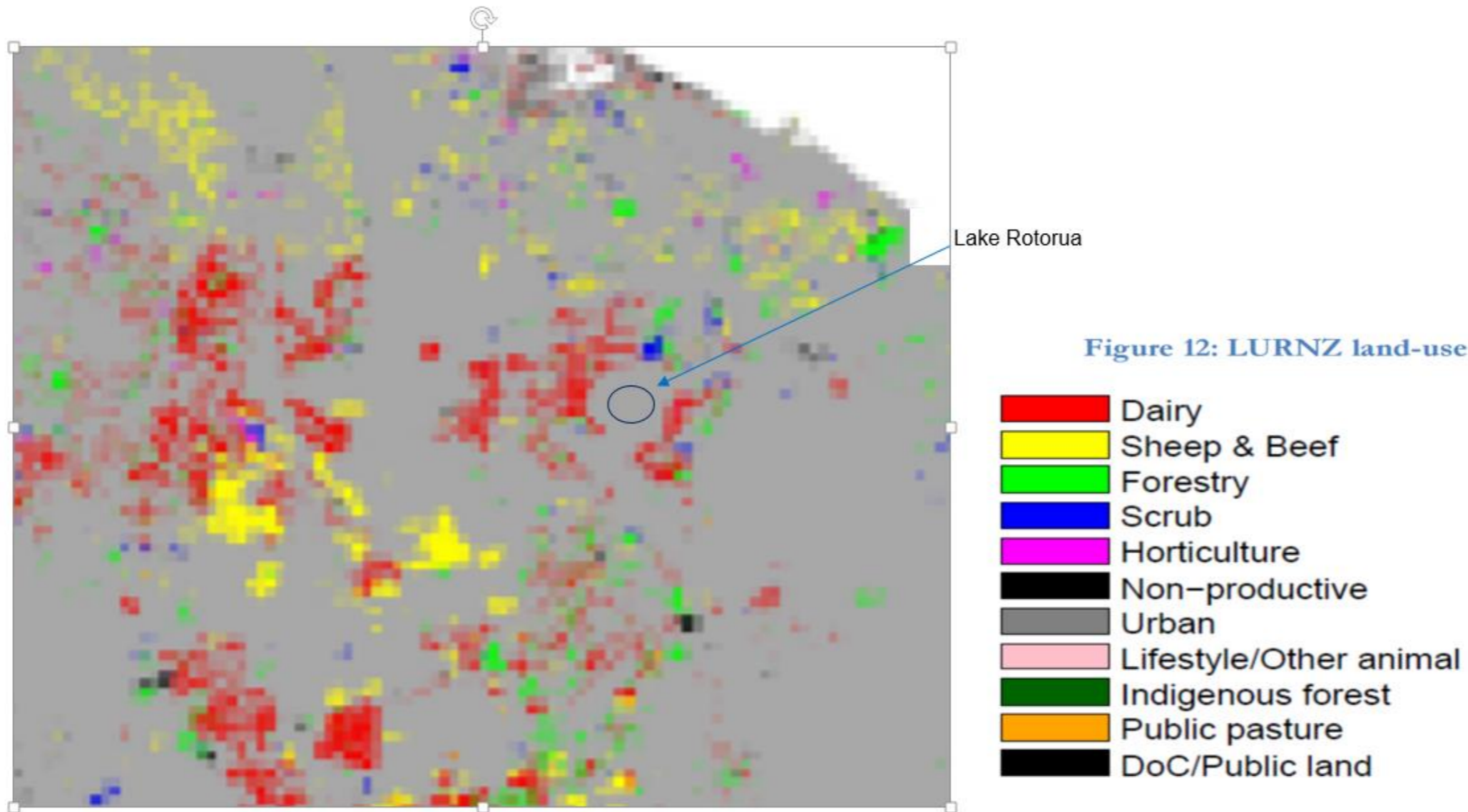
## 2. Policy Development process

## 3. Policy Development logic

- Uses an allocation regime
- Needs competent data
- That data is not available
- Poor process choice for this policy choice
- PC10 doesn't achieve the Purpose of the Act.



# Change in land use between 1996 and 2008



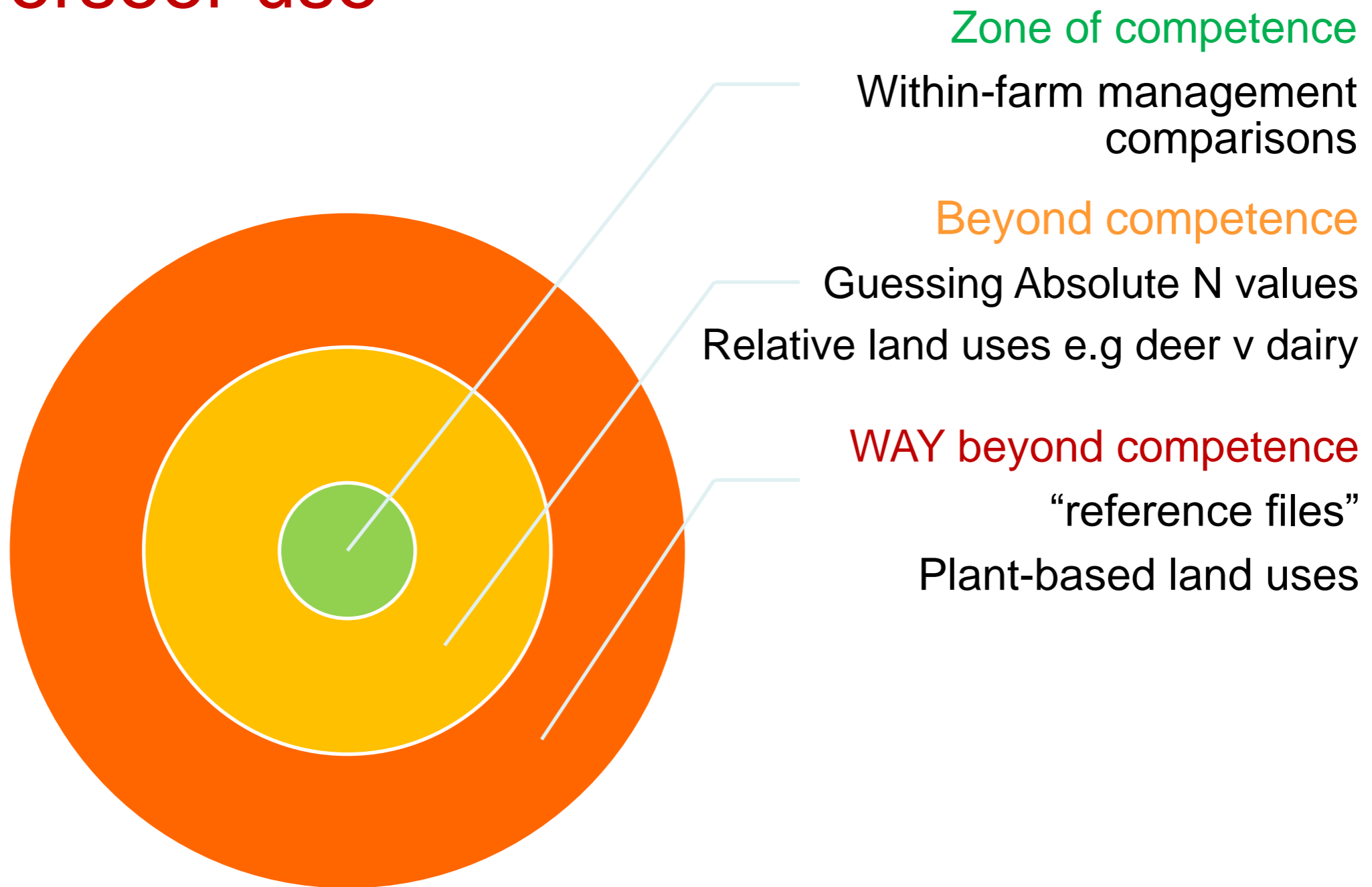


“All models are wrong...” “... but good models are useful”

Every model has assumptions **that limit**  
what it can tell us and  
**what it should be used for**

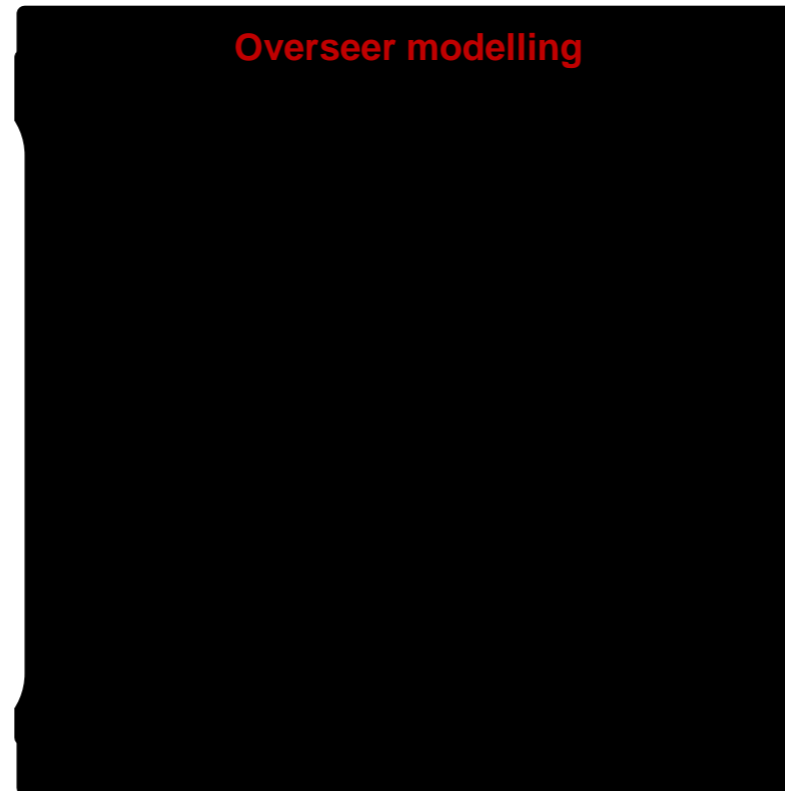
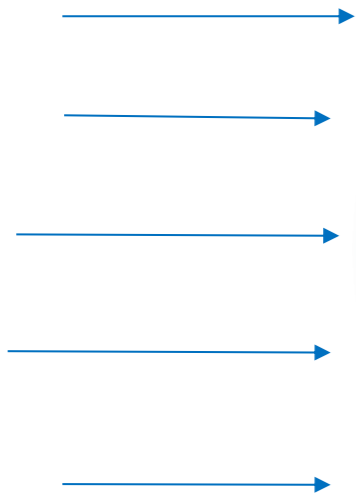


# Overseer use

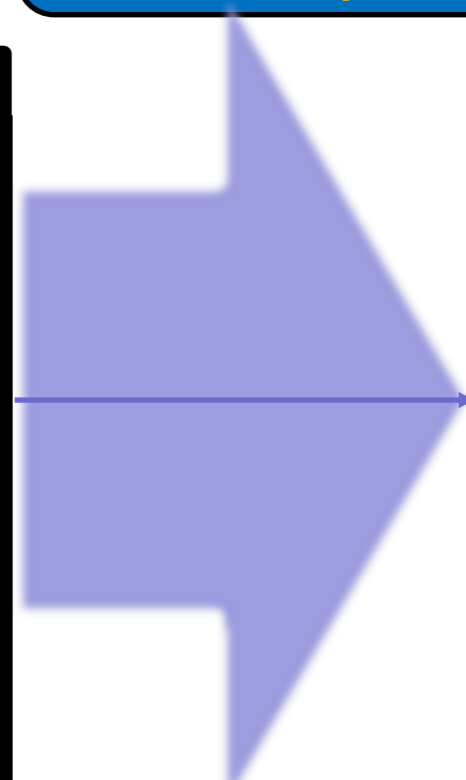




Detailed and precise inputs



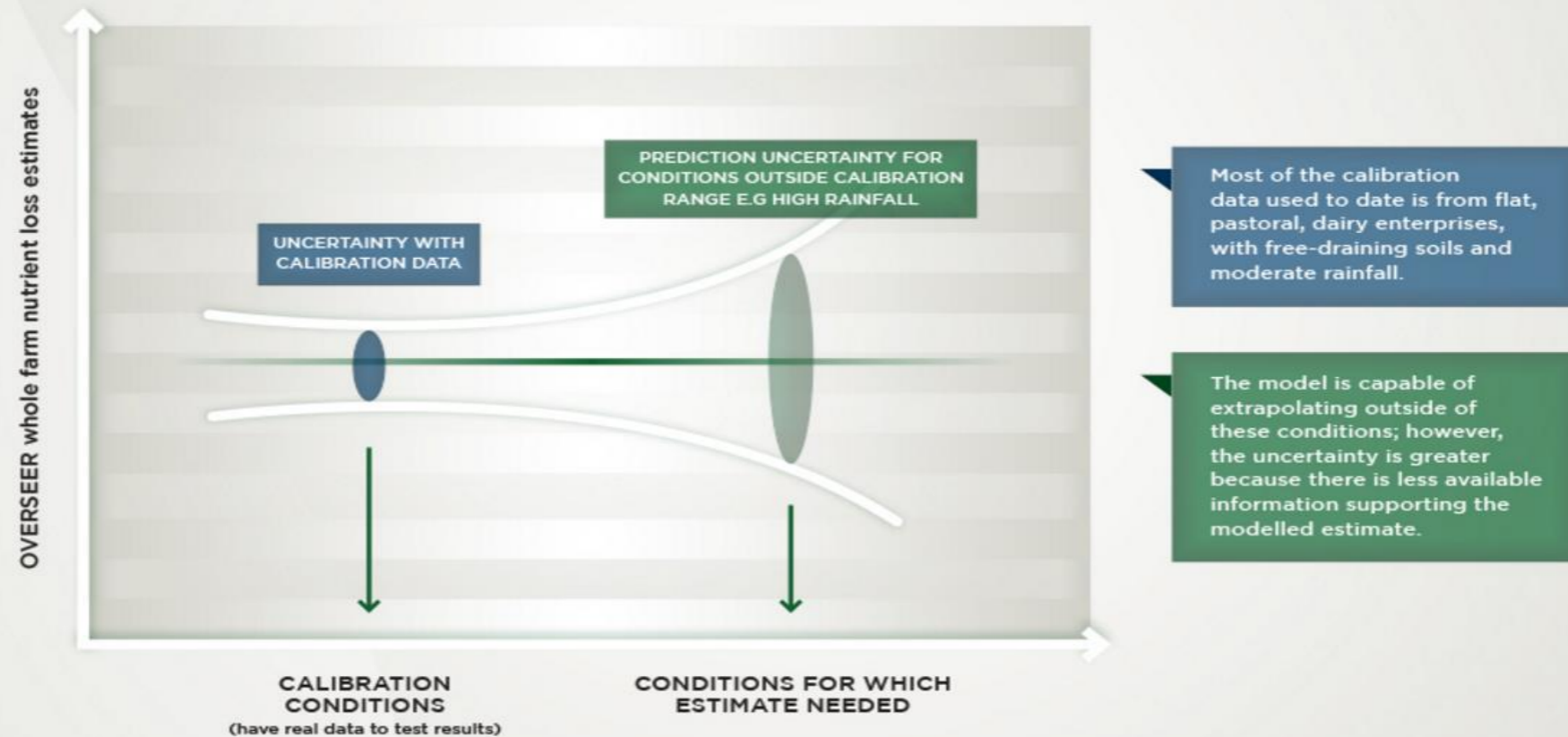
single number output



30% **known** uncertainty

- + errors in measurement (>20%)
  - + variance in data input (>15%)
  - + errors due to use at non-calibrated locations (>30%)
- Range = 0.33 – 2.33**





Most of the calibration data used to date is from flat, pastoral, dairy enterprises, with free-draining soils and moderate rainfall. Therefore, to strengthen the calibration dataset and to reduce uncertainty in model results, datasets from outside these conditions are required e.g. cropping, beef and sheep enterprises, clay and shallow soil types, rainfall zones > 1200 mm.

**Opportunities to reduce uncertainty in OVERSEER results**

There are many opportunities to reduce uncertainty in OVERSEER outputs, the main ones are listed below:

- Using the *OVERSEER Best Practice Data Input Standards*, to ensure the best quality data is used to describe the farm.
- Improving the understanding and description of farm systems - and how they are entered into OVERSEER.
- Using best practice evaluation, validation and calibration processes to review and develop the model. This requires:
  - Increasing the number of datasets of field measurements sitting outside the existing/typical calibration dataset range e.g. high rainfall, clay soils, enterprises other than pastoral/grazed.
  - Continually increasing the number of farmlet scale datasets for use in validation and calibration.
  - Using consistent methods for scientific measurements and data accumulation.
  - Linking to systems such as daily management monitoring.
  - Undertaking model comparison and inter-modal scale comparisons.

<sup>1</sup> Shepherd et al. 2013





# 1. CNIHL Context for interacting with Plan Change 10

- Settlement land
- Land owner, not forester

## 2. Policy Development logic

- Uses an allocation regime
- Needs competent data
- That data is not available
- Poor process choice for this policy choice
- PC10 doesn't achieve the Purpose of the Act.



## **Policy must**

### **Recognise risks to process**

Allocation is competitive

Process was collaboration.

Incompatible. Risks not managed

### **Not exceed the competence of implementation tools**

Model-based, with much uncertainty

Unsuited for policy based on unit certainty and defined property rights.

### **Support the purpose of the RMA**

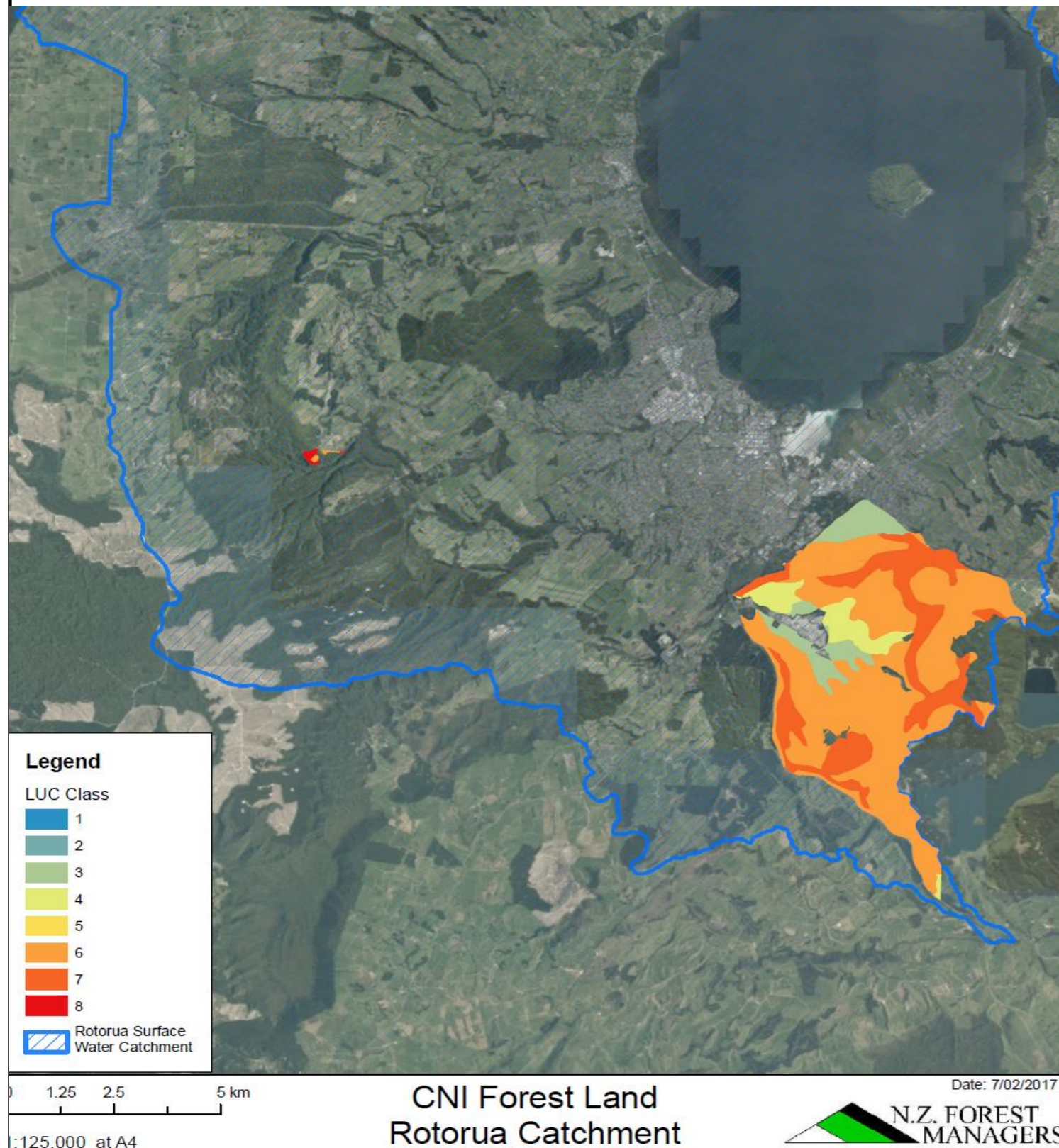
Inefficient use of resources

Will drive gaming behaviour rather than environmental improvement

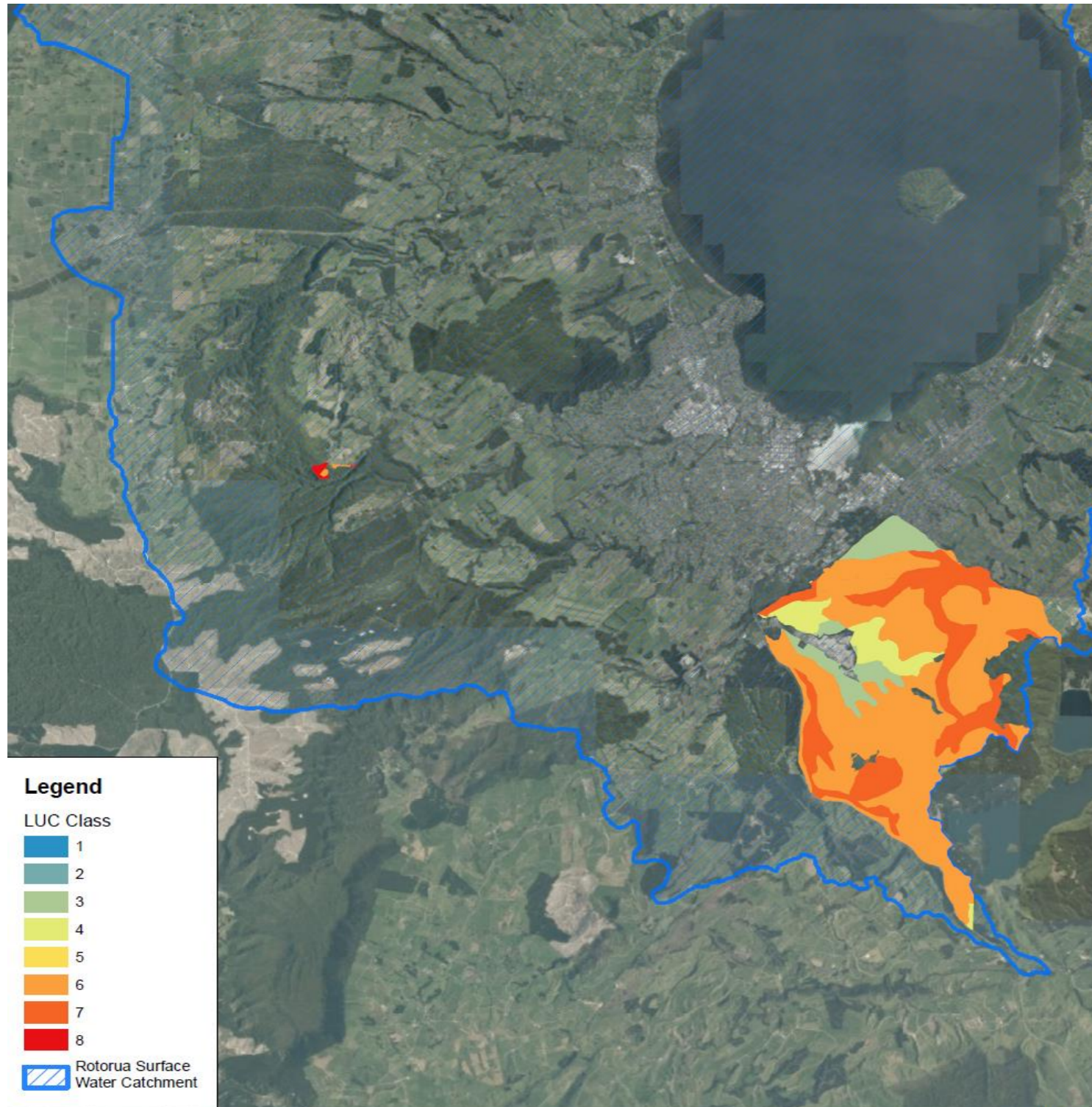


# Solutions

Use fees  
with three simple bands  
(i.e. no allocation)  
or  
Use a much simpler and  
fairer allocation. Based on  
Land Use Suitability.







**Legend**

LUC Class

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

Rotorua Surface Water Catchment

0 1.25 2.5 5 km

Scale: 1:125,000 at A4

**CNI Forest Land  
Rotorua Catchment**

Date: 7/02/2017





RPS Policy WL 5B principles and considerations	sector average allocation	Land Use Suitability
(a) Equity/Fairness, including intergenerational equity;	X	✓
(b) Extent of the immediate impact;	✓	X
(c) Public and private benefits and costs;	X	✓
(d) Iwi land ownership and its status including any Crown obligation;	X	✓
(e) Cultural values;	X	✓
(f) Resource use efficiency;	X	✓
(g) Existing land use;	✓	X
(h) Existing on farm capital investment; and	✓	X
(i) Ease of <i>transfer</i> of the allocation.	X	X
	3/9	5/9



## **LR R2 Permitted – From 1 July 2017, the use of land for plantation forestry or bush/scrub**

From 1 July 2017, the use of land for plantation forestry or bush/scrub in the Lake Rotorua groundwater catchment is a permitted activity, subject to the following conditions:

- (a) The land use remains in plantation forestry with no more than a two year interval between harvesting and replanting or upon harvesting the land is permanently retired; or
- (b) The land use remains in bush/scrub and is not used for grazing; and
- (c) There is no transfer of Nitrogen Discharge Allocations or Managed Reduction Offsets either to or from the property/farming enterprise.

*Advice Note: 1 Plantation forestry and bush/scrub may be managed as part of a pastoral property/farming enterprise.*

## P 350 s32 report March 2004

Possible lost opportunity costs to agricultural landowners. There will be different costs to different landowners depending on the state of development on the property, the type of nutrient mitigation measures used on the property, and the long term goals of the landowner. As the provisions require no net increase in nutrients from the catchment, agricultural activities can only intensify within current physical limits.

The real issue with nutrient leaching is stock numbers. Increasing fertiliser application grows more grass, which allows more stock and urine patches, from which nitrogen and phosphorus leach. However, stock efficiency is currently limited. A dairy farm generally only captures 40% of nitrogen inputs in the product, the remainder is lost into the environment. Increasing fertiliser application is a waste of money if a property has achieved maximum stock efficiency. A 'sustainable' farm may be at a lower stocking rate. **A report by agKnowledge for Environment Bay of Plenty (2003), found that of the 6 farms surveyed in the Rotorua Lakes, four farms (3 dairy farms and 1 sheep and beef farm) were above their economic optimum, where nutrient inputs could be reduced without compromising profitability. It was also found that many dairy farms are applying fertiliser to effluent disposal paddocks, where such applications are unnecessary. Efficient farming is to maximise profitability, which may not necessarily mean increasing productivity. Reducing costs may also achieve the same goal.**

Innovation and efficient intensification may result in financial savings to farmers (e.g. better targeting of fertiliser), while remaining within the nutrient envelope established by provisions in the plan. Land uses, other than traditional dairying or stock grazing, may be more economic in the medium to long term. Sub-division for lifestyle blocks, forestry, tourism ventures, alternative crops, or alternative animal types may all be viable, low nutrient leaching options. Such changes would require initial capital investment.

- The cost of nutrient export mitigation works are varied, and will be site specific.

An indication of some possible works are use of a winter pad (\$100,000 capital cost – based on 400 herd size, includes costs of pad, rails, gates, trough, fences, ancillary gear), wintering stock out of catchment (\$90,000 per year – assumes 400 cows @ \$15/head/week x 13 weeks, plus \$15 per cow transport one way for 100 km), riparian retirement (fencing = \$10 per metre, planting varies depending on the width of land and density of plantings).

- Agricultural land uses and industries will be affected by the provisions. The estimate for agricultural output for Rotorua District for the year ended 30 June 2001 was \$261 million. 21% of the total pasture land cover in Rotorua District is within the five lakes' catchments that are currently below their TLI in Objective 10; Lakes Rotorua, Rotoiti, Rotoehu, Okareka and Okaro. This equates to \$55 million. Note that it is not appropriate to use figures for the whole of Rotorua District as a considerable proportion of pastoral land use is outside the Bay of Plenty Region. It is difficult to assess the actual effect of the provisions on the agricultural industry as wider market changes may impact the industry, landowners may choose to improve the efficiency of their operations, or change land uses.
- Some inequity for owners of undeveloped land. This is recognised and acknowledged by Environment Bay of Plenty.



### *how Rule 11 was not implemented?*

It is often argued by economists that markets are more efficient than centralised government decision making because they automatically gather information and ensure that supply and demand are balanced and resources allocated efficiently.

However, this sort of argument cannot be applied to artificial markets such as those created for pollution rights since the need for monitoring and enforcement remains and is, in fact, arguably greater.

For emissions trading to work properly, the regulator needs to know what emissions a company is making so as to check that it has sufficient permits.

Too often inspection and verification does not happen.

<https://www.uow.edu.au/~sharonb/STS300/market/rights/criteriainfo.html>

## ***P341 RWLP s32 report***

*The current version of Rules 11 is an interim measure. The intent of Method 35A [now 41] is to reconsider the applicability of the rules relative to each individual lake and the outcomes from the Action Plans, and develop rules appropriate to the individual catchment.*



# Marginal cost curve of reducing N

