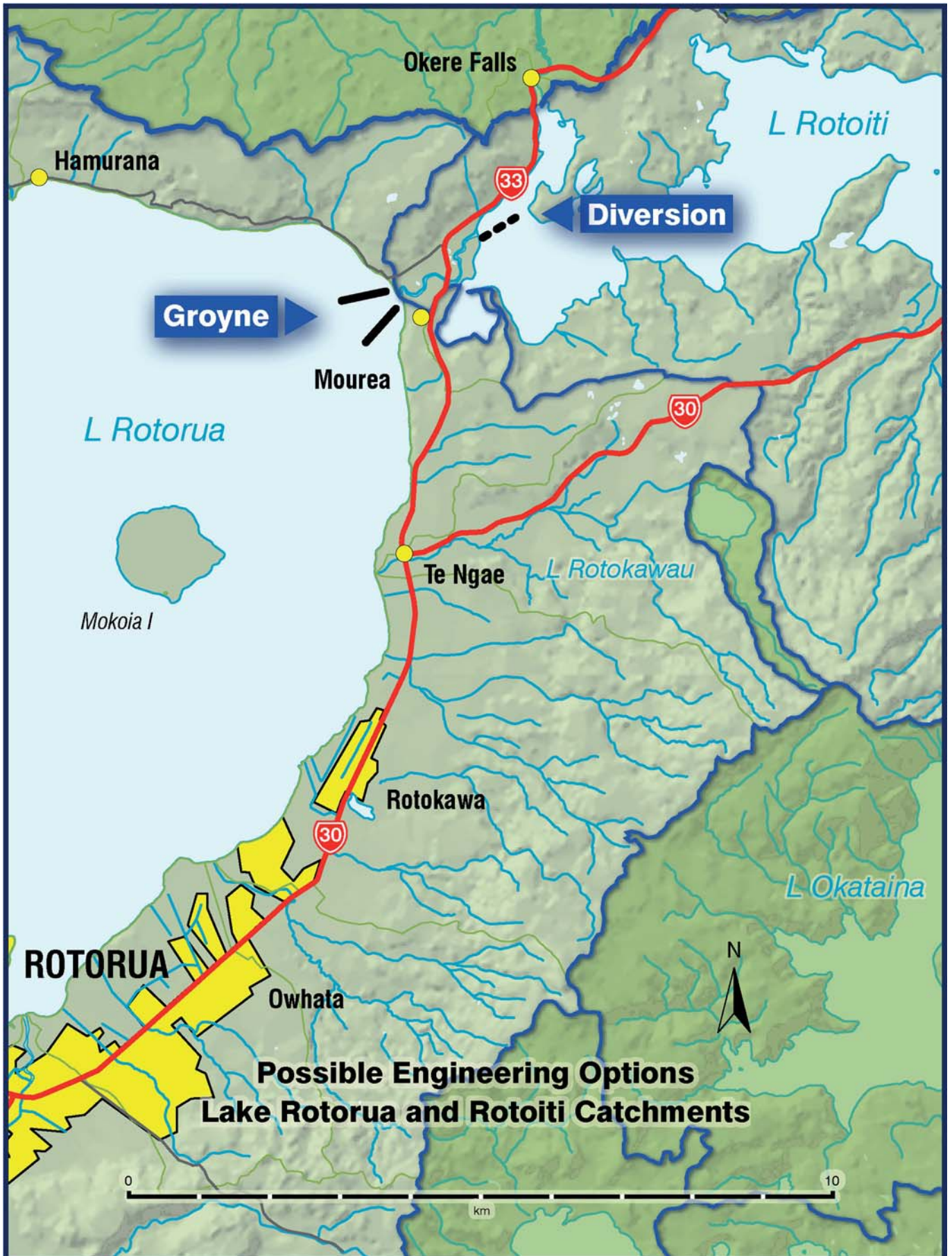


# Groyne/diversion



# Rotorua catchment Nitrogen and Phosphorus targets with timescale

## The problem

Water quality is declining in several Rotorua lakes. The cause is nutrient overload. The amount of nutrient (nitrogen and phosphorus) in the lakes has increased markedly over the past few decades, and continuing to rise.

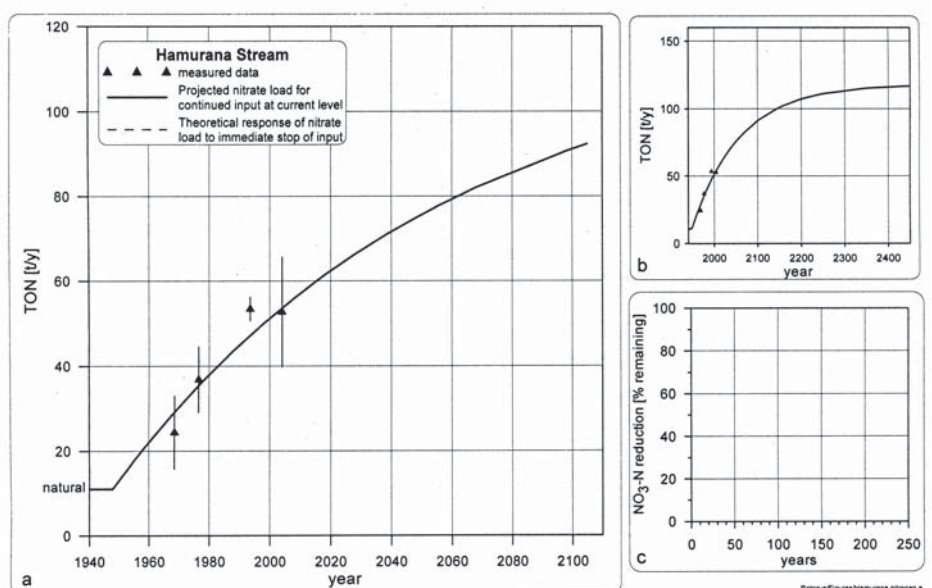
The main causes:

- Land use activities, particularly intensive farming.
- Sewage from Rotorua city and rural communities.
- High natural phosphorus load because of the old age groundwater flowing through the geology.
- Large amounts of nutrients stored in the sediments of some lakes.

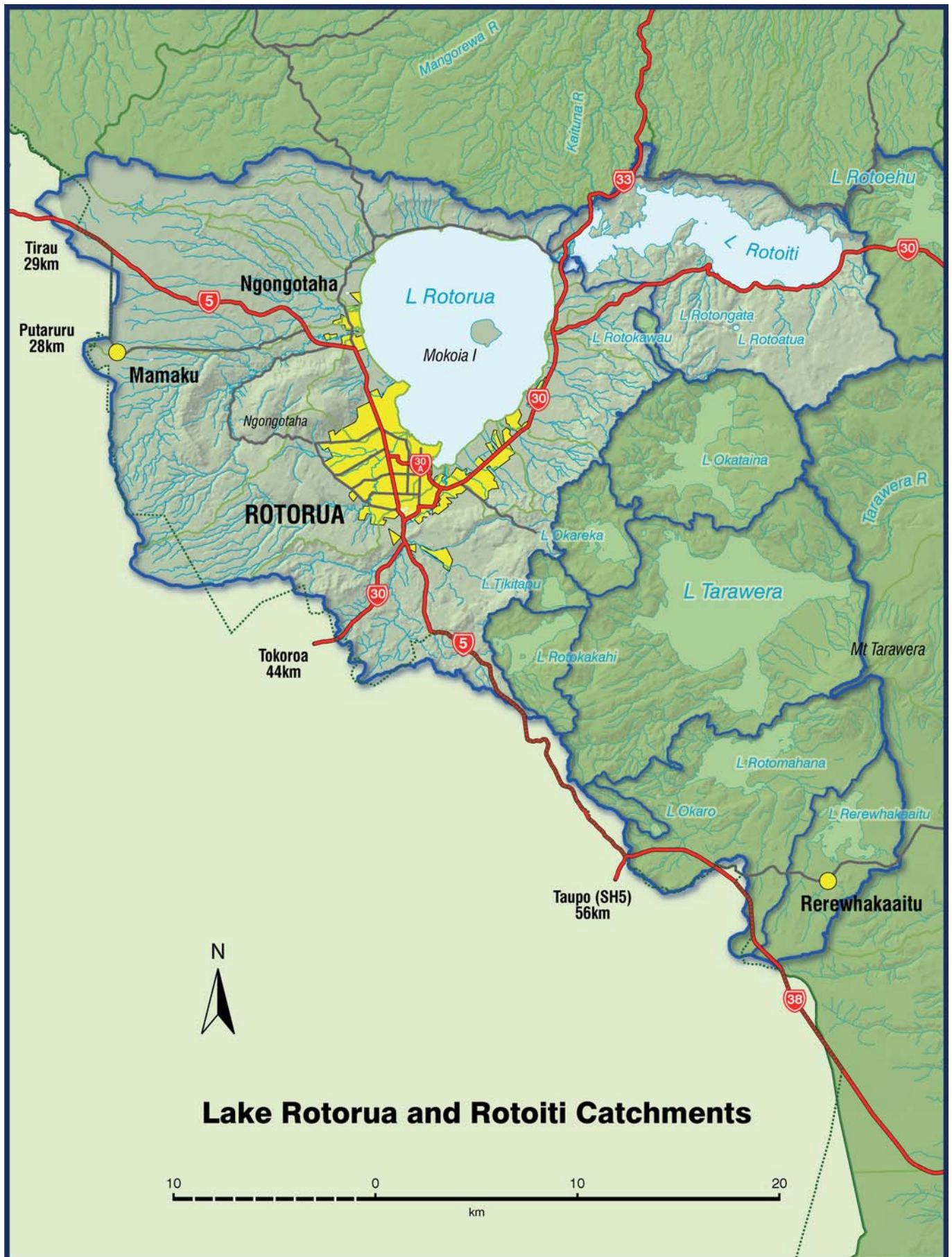
Expected load tonnes/year	2005	2050	2100	2150	>2200
Nitrogen	581	683	722	742	769
Phosphorus	39.1	39.1	39.1	39.1	39.1
Reduction target tonnes/year					
Nitrogen	151	253	292	312	339
Phosphorus*	35	35	35	35	35

\* combined sediment plus catchment

Nitrogen drives productivity now so any reduction will reduce productivity in the lake. If we can make phosphorus limited by reducing the catchment load plus the sediment load by 35 tonnes/year, then that will also come into play in improving Lake Rotorua.



# Lake catchments



**Lake Rotorua and Rotoiti Catchments**

# Fencing and revegetation planting



## Riparian protection in the Rotorua Lakes Catchment

