# Lake Tarawera Action Plan

Presented by

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ROTORUA TE ARAWA LAKES PROGRAMME

Proud Partners

DESTINATION ROTORUA
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TE ARAWA LAKES TRUST

Bay of Plenty REGIONAL COUNCIL

# A Complicated Lake

- 80% groundwater
- Seven outer lakes contribute
  - Inner and outer catchment
- Groundwater information incomplete
- Difficult to prepare nutrient budget
- Residency uncertain

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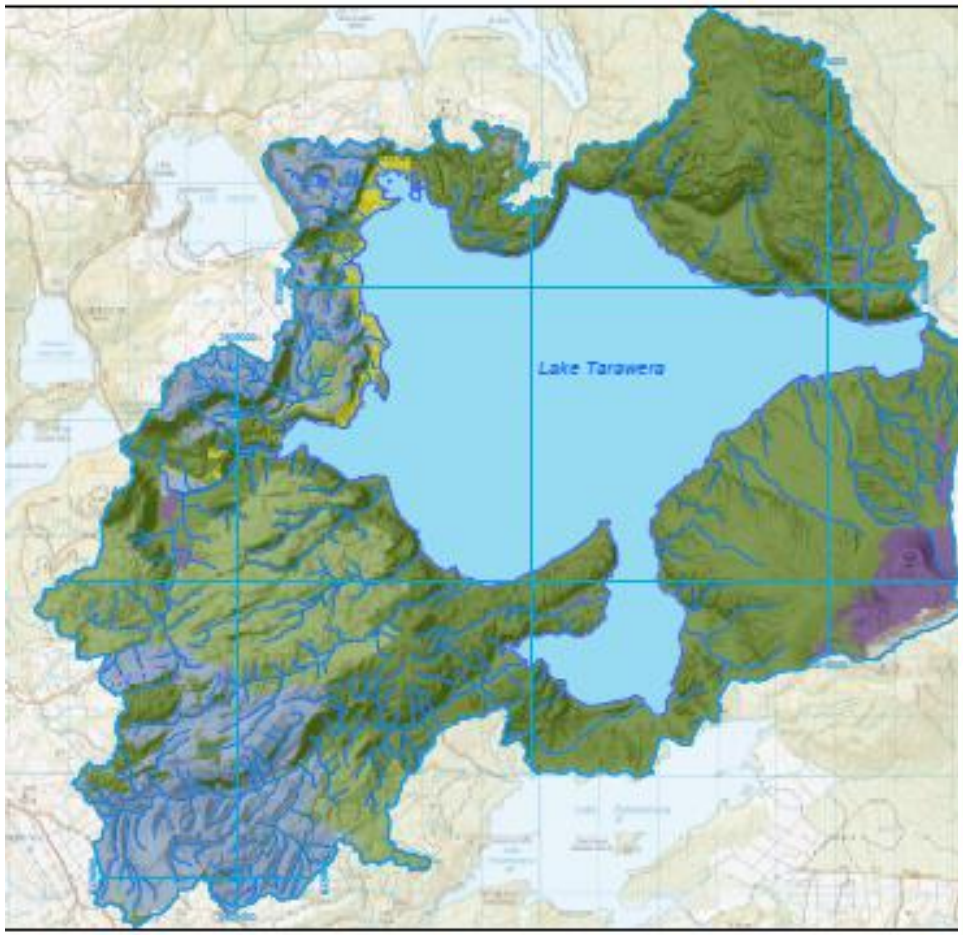
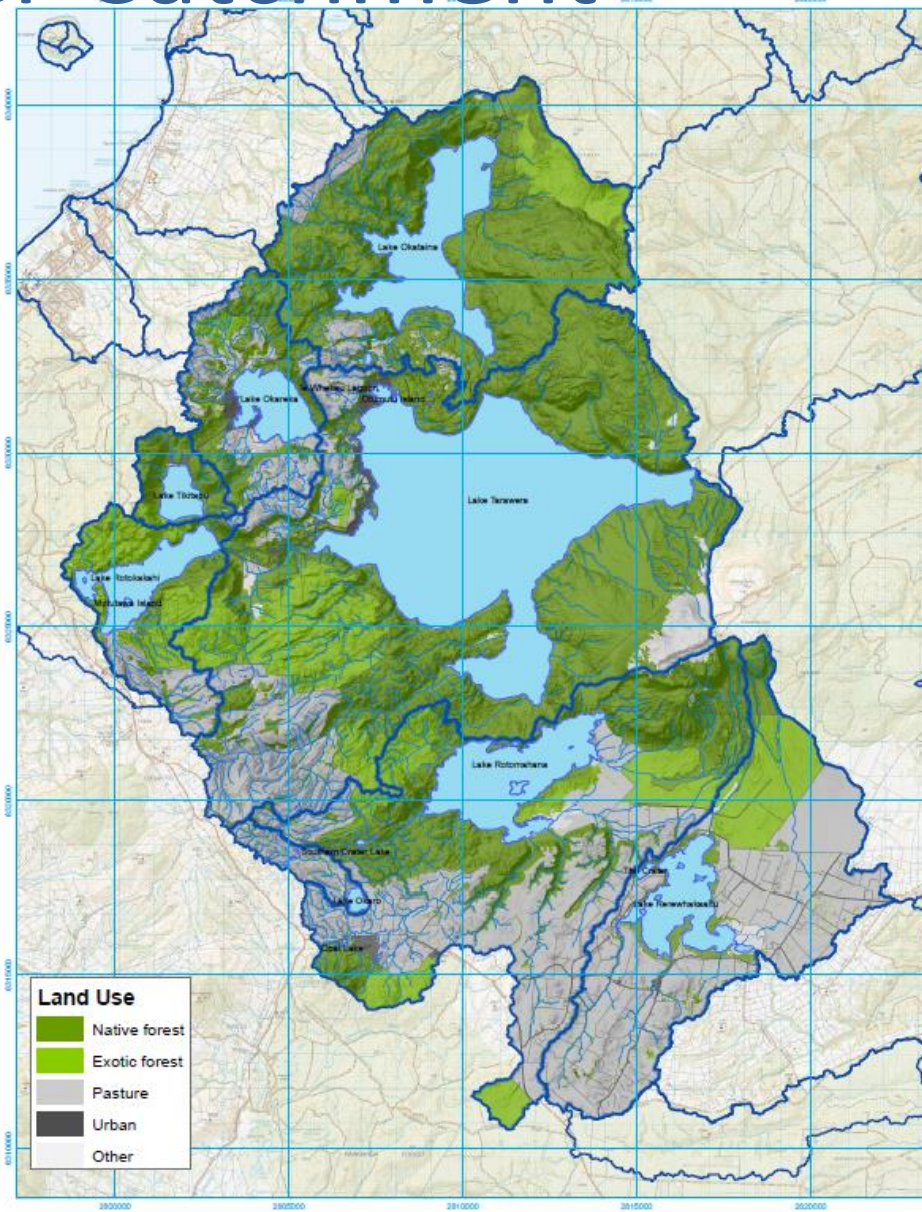
# Inner v Outer Catchment

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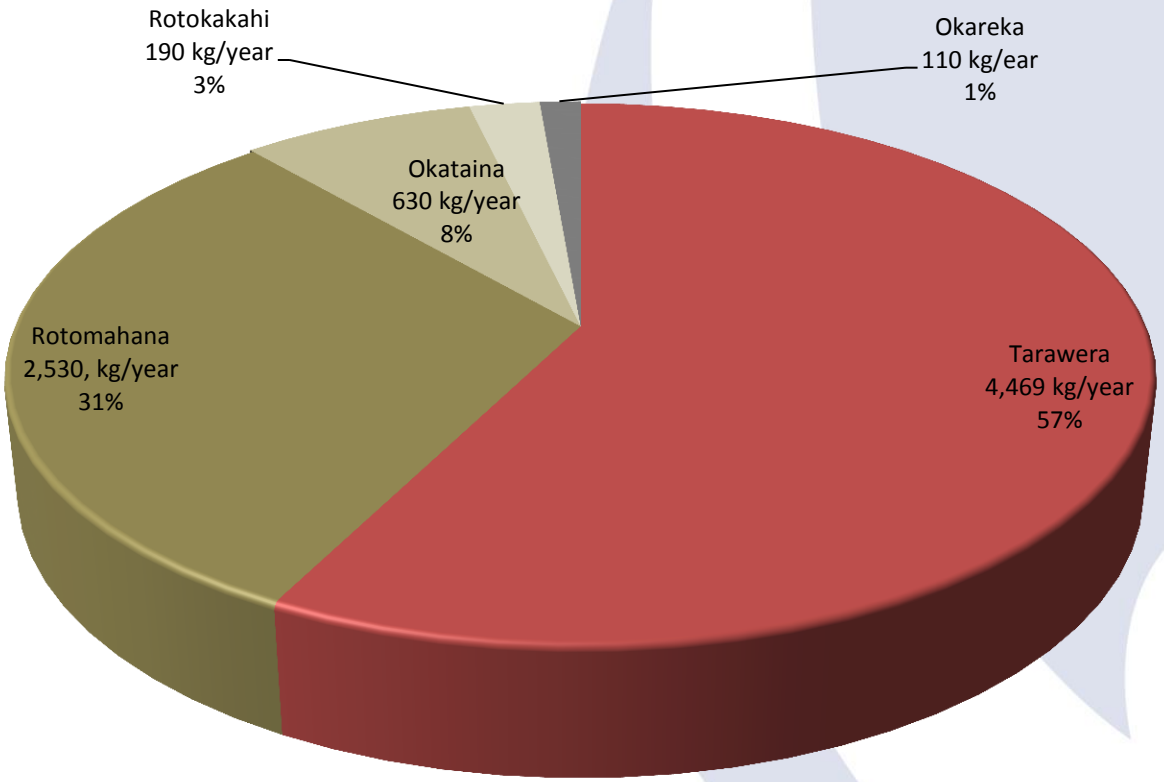
# Total Phosphorus

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# Inner catchment

- Total reduction 1,200 kg
- 57% of 1,200 = 684 kg
- Sewage reticulation = 283 kg
- Pasture = 401 kg

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# Outer catchment

- Total reduction 1,200 kg
- 43% of 1,200 = 516 kg
- Phosphorus loss = 2/3 to lakebed
- Total reduction from land in outer catchment = 516 *3 = 1,548 kg

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# Outer catchment

| Lake | Proportion of total (%) | Phosphorus reduction (kg/year) |
|---|---|---|
| Rotomahana (also Ōkaro and Rerewhakaaitu) | 73 | 1,130 |
| Ōkataina | 18 | 279 |
| Rotokakahi | 6 | 93 |
| Ōkāreka | 3 | 46 |
| **Total** | **100** | **1,548 kg/year** |

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# Key actions

| Action | Nitrogen reduction | Phosphorus reduction |
|---|---|---|
| Reticulation of sewage | 2,829 kg | 283 kg |
| Better management of agricultural land-use (inner catchment) | n/a | 389 kg |
| Control of nitrogen fixing plants | 230 kg | n/a |
| Better management of agricultural land-use (outer catchment) | n/a | 528 kg |
| Develop capping rules for inner catchment | n/a | n/a |

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