Lake Taupo Protection Trust

Protecting the water quality of Lake Taupo
Lake Taupo Protection Trust
Who we are

- John Kneebone, Chairman, Cambridge
- Jerry Rickman, Deputy Chairman, Hamilton
- John Hura, Turangi
- Sue Yerex, Turangi
- Colin Horton, Hamilton
- Gerald Fitzgerald, Wellington
Lake Taupo Protection Trust
What we are

- LTPT - a Charitable Trust formed with a fund of $81.5 million to help protect the water quality of Lake Taupo

- LTPT role supports the protection of Lake Taupo through environmental policies enacted under the Resource Management Act

- LTPT is set up under the Local Government Act 2002

- Trust documents specify responsibilities, performance measures and other matters

- LTPT reports to Lake Taupo Protection Project Joint Committee
Lake Taupo Protection Trust

Joint Committee
2 representatives from Government, Ngati Tuwharetoa, Taupo District Council, Environment Waikato

Lake Taupo Protection Trust
Up to 8 people appointed by Joint Committee
 Responsible for implementing strategies to reduce manageable N by 20%
Lake Taupo Protection Trust
Trust funding

- Ministry for the Environment 45% - Taxpayer
- Environment Waikato 33% - Regional Ratepayer
- Taupo District Council 22% - Local Ratepayer

- $81 Million including GST over 15 years
- Reviewed after 5 years
Protecting Lake Taupo

Taupo Catchment

Key
- Tussock grassland
- Shrubland
- Primarily pastoral
- Planted forest
- Indigenous forest
- Water
- Wetland
- Bare ground
- Urban area
Protecting Lake Taupo
Role of LTPT

Role of LTPT in protecting the water quality of Lake Taupo

- Initial Benchmarking (with EW) nitrogen discharge allowances (NDAs)
- Purchasing N (20 %)
- Facilitating N reduction with land owners
- Supporting research and the technology transfer to reduce N
- Facilitating joint ventures or partnerships to achieve Trust objectives
- Sourcing additional funding (Charitable Trust)
- Monitoring and reporting on Trust performance
Lake Taupo Protection Trust
What we do

Reduce manageable N from the Lake Taupo Catchment by 20% over next 13 years

- 100 tonnes N to the lake

Potential Methods

- By land purchase and convert to low N land use (e.g. forests)
- Purchase NDA directly, secure with changes to resource consent (decrease NDA) - this may be surplus N from land use change e.g. farm to low N horticulture, forestry or from use of nitrogen reduction technologies, e.g. wintering off, feedpads

Note

- Other factors considered in decision to purchase N (e.g. Carbon offsets, public access benefits)
## Land use – Lake Taupo Catchment

<table>
<thead>
<tr>
<th>Land use</th>
<th>Area (ha)*</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undeveloped</td>
<td>154466</td>
<td>56</td>
</tr>
<tr>
<td>Planted forests</td>
<td>64578</td>
<td>24</td>
</tr>
<tr>
<td>Sheep and beef</td>
<td>48767</td>
<td>18</td>
</tr>
<tr>
<td>Dairy</td>
<td>2319</td>
<td>1</td>
</tr>
<tr>
<td>Urban</td>
<td>3500</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>273,630</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

* subject to revision as land use changes
Lake Taupo Protection Trust
What we do

Purchaser of permanent N reduction

How
- Trust required to purchase N cost effectively
- Landowners can approach Trust directly when benchmarked and consented

Note
- Different $ value for N depending on farm system or circumstance
- No floor price for N
- Permanent reductions required
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What we do

Fund research into alternative low N leaching land uses and improved low N pastoral systems

How
• By granting funds for applied research
• 60% to alternatives, 40% to low N pastoral systems
• Trials done on land in the catchment

Note
• Evaluation criteria including:
• relevance, effectiveness, leverage, risk, state of technology, cost, innovation, reputation of research organisation
Lake Taupo Protection Trust
What we do

Benchmarking (in partnership with EW)

How
- Gather farm information to determine landowner NDA
- NDA is essential to manage N loss off farm and for LTPT to purchase N
- NDA is used to develop your N management plan
- N management plan forms the basis of your consent

Note
- Accurate information necessary or conservative values assigned for existing pastoral land
- Alternative is to accept permitted activity levels (8 kg N/ha/y)
- A NDA is required before the Trust is able to purchase your N
- No consent = non compliance = a regulatory response
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Nitrogen Offsetting

- N offsetting - an increase of N lost from one property is compensated for (offset) by a reduction of N lost from another property so that the N cap is maintained.

- N offsetting is important to allow flexibility and the limited N to be used to advantage.

- Land owners may buy, lease or sell NDA’s to each other.

- Any purchase, lease or sale of NDA’s needs to be authorised by a change to a condition of a resource consent under s127 of the RMA.
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Nitrogen Offsetting

- For any application under s127 to increase an NDA there must also be an application under s127 to decrease an NDA
- Purchase, lease or sale price is a matter for individuals to determine
- The Trust can also use the nitrogen offsetting mechanisms to purchase NDA’s
1 ha Forest = 2 kgN/yr

2 x 0.5 ha sections with advanced wastewater system = 11.8 kgN/yr

Result: an additional 9.8 kg N for the ha of land

1 ha sheep/beef = 14 kgN/yr

0.82 ha forest + 0.18 ha sheep/beef = 4.2 kgN/yr

The trade results in no N increase

Result: a saving of 9.8 kg N for the ha of land
Protecting Lake Taupo
Role of Environment Waikato

Role of EW in protecting Lake Taupo

- Implementing policy
  - Benchmarking nitrogen discharge allowances (NDAs)
  - Issuing, changing and managing consents
  - Providing information and advice to land owners
- Ensuring compliance with the rules protecting the lake
- Monitoring
  - Health of the lake
  - Effectiveness of policies
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Other Information

• Typical N leaching rates
  • Forest (2 kg N/ha/y)
  • Sheep and Beef (9 – 16 kg N/ha/y)
  • Dairy (35 – 70 kg N/ha/y)
  • Basic septic tank (10 kg N/y)
  • Advanced septic tank (3.5 kg N/y)

• Nitrogen off-setting
  • Your leaching rates are determined from NDA
  • Typical offsets
    • 1 ha sheep and beef ~ 4.5 – 8 ha forest
    • 1 ha dairy ~ 17 – 35 ha forest
    • 1 ha dairy ~ 2 – 8 ha sheep and beef
    • All of Kinloch (500 kg N/y ~ 50 ha sheep & beef ~ 10 ha dairy)
Lake Taupo Protection Trust
Summary

- Public fund to protect the water quality of Lake Taupo
- Funding research into alternative low N leaching land uses and improved low N pastoral systems
- Assisting farmers with benchmarking and land use change
- Benchmarking to obtain an NDA and consent is necessary for:
  - certainty in farm planning
  - N offsetting
  - maximising flexibility under the nitrogen cap, and
  - for the Trust to purchase your N