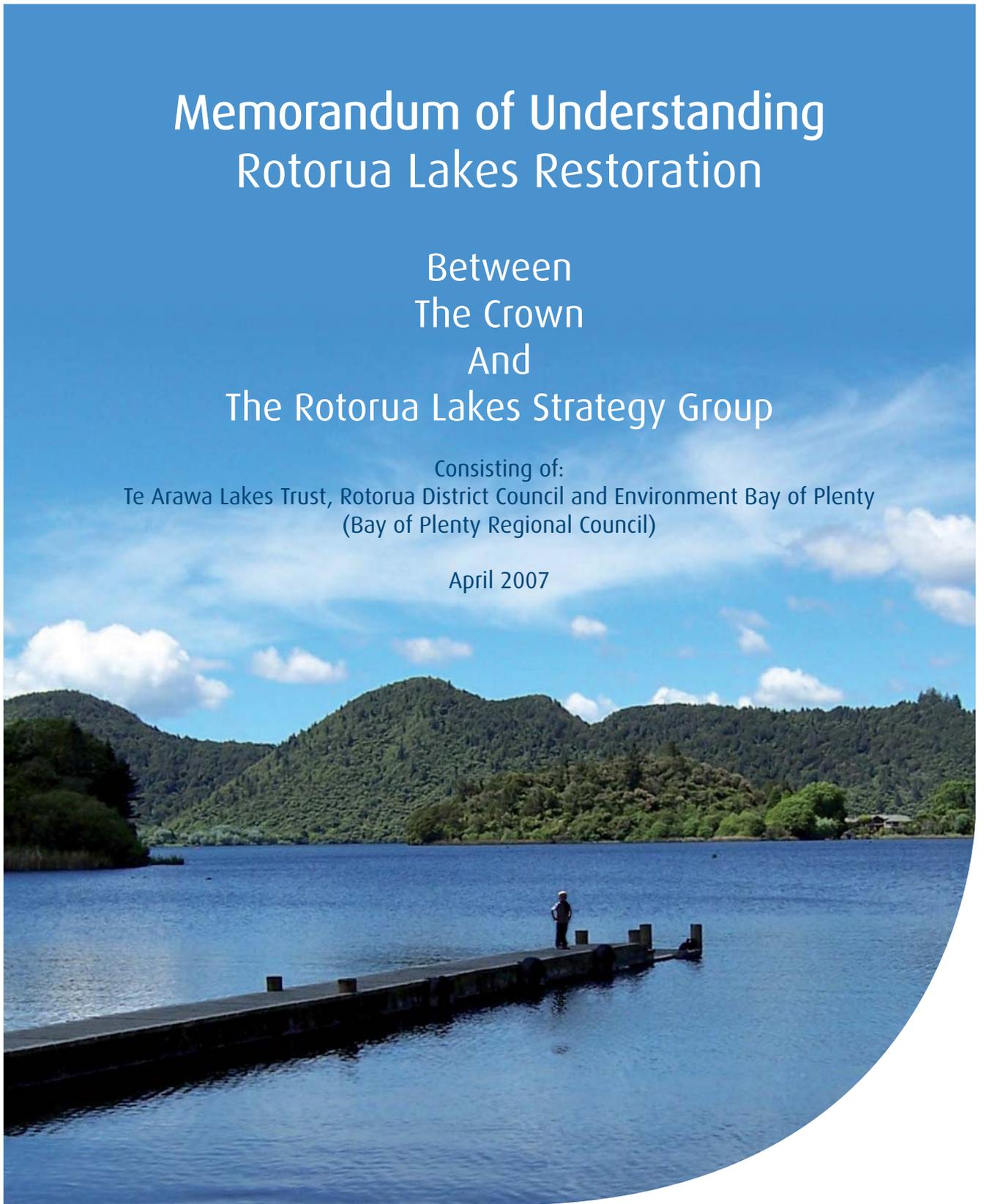


Memorandum of Understanding Rotorua Lakes Restoration

Between
The Crown
And
The Rotorua Lakes Strategy Group

Consisting of:
Te Arawa Lakes Trust, Rotorua District Council and Environment Bay of Plenty
(Bay of Plenty Regional Council)

April 2007



An **Environment Bay of Plenty**, **Rotorua District Council** and **Te Arawa Lakes Trust** joint project



THIS MEMORANDUM was made on

**BETWEEN The Crown and the Rotorua Lakes Strategy Group consisting of
Te Arawa Lakes Trust, Rotorua District Council and
Environment Bay of Plenty (Bay of Plenty Regional Council)**

1 Preamble

The Rotorua Lakes (also known as the Te Arawa Lakes) are an important asset for the local, regional and national community. They are also a significant tourist drawcard and showcase New Zealand's environment. The Lakes are identified as having national cultural and heritage significance.

Historical uses of the catchments that feed water to these lakes, and the lack of understanding about cause and effect relationships for these uses, have created a significant problem. Degraded water quality and associated algal blooms prevent the local community, and national and international visitors to the Lakes experiencing their true values.

The process of restoring the water quality of the Rotorua Lakes will require a long-term partnership and the commitment of the four parties to work together.

This Memorandum of Understanding has been developed between the Crown, Rotorua Lakes Strategy Group consisting of Te Arawa Lakes Trust, Rotorua District Council and Environment Bay of Plenty to assist the four partners in addressing the future of the Rotorua Lakes.

The agreed vision for the Lakes as documented in the Strategy for the Rotorua Lakes 2000 is:

The lakes of the Rotorua district and their catchments are preserved and protected for the use and enjoyment of present and future generations, while recognising and providing for the traditional relationship of Te Arawa with their ancestral lakes.

To promote the sustainable management of the lakes, it is necessary to look at catchment management and the effects of human activity across a wide range of land-uses (including urban, agricultural, forestry and recreational). Appendix 1 shows the Rotorua Lakes and their associated catchments. There are also a wide range of pollutant sources that can influence the water quality of the Lakes such as sewage infiltration, nutrient enrichment of streams and ground water by agriculture, riparian management regimes, and urban run-off discharge points.

The key area of concern is the water quality of the Lakes and how it can be maintained or improved. Maintenance and improvement is judged against the trophic level indices described in Appendix 2. However, achieving the long term water quality goals will require significant changes to land use within the various catchments.

2 Purpose

The purpose of this Memorandum is to establish a formal, working relationship between the Crown and the Rotorua Lakes Strategy Group - consisting of Te Arawa Lakes Trust, Rotorua District Council and Environment Bay of Plenty - in relation to the objective of maintaining or improving the water quality of the Rotorua Lakes through the Rotorua Lakes Protection and Restoration Action Programme.

3 Principles

1. We recognise that preserving and protecting the Lakes will take a great deal of time, effort and financial resources to accomplish the restoration of the Lakes and the water quality.
2. We recognise there are legacy problems that have been created over a long period by actions that had impacts that were often unknown or uncertain.
3. We recognise that there are significant financial commitments that will need to be made over time by the parties. This document does not guarantee or commit the parties to any financial commitments.
4. We recognise that the restoration of the Lakes will require adaptive management, where actions and approaches may change as our understanding of the Lakes change with future research.
5. We recognise that cost sharing is appropriate but that the share from different parties may vary between lake projects and programmes.
6. We recognise that the timeframe to implement actions to address Lake restoration is likely to exceed 10 years and that recovery in some lakes will take longer.
7. We recognise that all parties will be diligent in pursuing opportunities to achieve the goal of maintaining or improving the water quality of the Lakes.

4 Roles

The following roles define the contributions that the parties will bring to the partnership.

4.1 All Parties

- To regularly attend the Rotorua Lakes Strategy Group (constituted under the Te Arawa Lakes Settlement Act 2006) to enable all parties to discuss and debate issues.
- To consider funding for specific projects on a case-by-case basis to contribute to agreed project outcomes.
- To facilitate consultation amongst and between the parties, and with other stakeholders.

4.2 The Crown

- Owner of the Crown stratum.
- To provide the national perspective on lake management and matters of national importance.

4.3 Environment Bay of Plenty

- To take a lead role in implementing the Strategy for the Rotorua Lakes.
- To undertake Resource Management Act administration in accordance with section 30 functions to implement the Strategy for the Rotorua Lakes.
- To take a lead role in water quality issues.
- To take a lead role in implementing the Rotorua Lakes Recreation Strategy and Aquatic Pest Management Strategy.
- To plan for and to manage land uses within the Lake catchments in association with Rotorua District Council.

4.4 Rotorua District Council

- To undertake Resource Management Act administration in accordance with section 31 functions to implement the Strategy for the Rotorua Lakes.
- To take a lead role in urban sewerage and stormwater discharge infrastructure.
- To plan for and to manage land uses within the Lake catchments in association with Environment Bay of Plenty.

4.5 Te Arawa Lakes Trust

- Owner of the Lake beds.
- To provide cultural advice on all aspects pertaining to the Lakes.

5 Not legally binding

This document does not legally bind the parties. It is not intended to be a legally enforceable agreement.

6 Summary

This Memorandum is designed to ensure that there is clarity around the roles, responsibilities and expectations of all parties. The partnership that this Memorandum reflects is critical to achieving the objective of maintaining and improving the water quality of the Rotorua Lakes.

Signed on behalf of

Her Majesty the Queen acting by and through the Minister for the Environment

Signed: _____ Date: _____

Hon David Benson-Pope

Te Arawa Lakes Trust

Signed: _____ Date: _____

Putu Mihaka

Chair

Rotorua District Council

Signed: _____ Date: _____

Kevin Winters

Mayor

Environment Bay of Plenty (Bay of Plenty Regional Council)

Signed: _____ Date: _____

John Cronin

Chair

Appendix 1: The Rotorua Lakes and Catchment Boundaries



Appendix 2: Trophic Level Indices

Environment Bay of Plenty Proposed Regional Water and Land Plan has an objective that:

The water quality in the Rotorua lakes is maintained or improved to meet the following Trophic Level Indices:

Lake	Trophic Level Index	3-yearly average TLI to 2005
Okareka	3.0	3.3
Okaro	5.0	5.6
Okataina	2.6	3.0
Rerewhakaaitu	3.6	3.4
Rotoehu	3.9	4.6
Rotoiti	3.5	4.5
Rotokakahi	3.1	Unknown
Rotoma	2.3	2.5
Rotomahana	3.9	3.8
Rotorua	4.2	5.0
Tarawera	2.6	2.9
Tikitapu	2.7	3.2

Environment Bay of Plenty uses the Trophic Level Index (TLI) system as a means of measuring lake water quality based on the amount of total nitrogen, total phosphorus and chlorophyll A (algae) present in the lake, and the clarity of the lake. Chlorophyll A and clarity (measured as secchi depth) are a consequence of the amount of total nitrogen and total phosphorus in a lake. The resulting numeric value is the TLI for an individual lake.

The TLI methodology can be used to establish an average TLI value for a lake for the period over which water quality data has been collected, or to determine the rate of change in the trophic level of a lake.

This quantitative system provides definitive information about the state of the lake water quality in the region.