

ROTORUA LAKES ACTION PLAN PROJECT:

Recommendations to improve the outcomes and process of developing Action Plans for Rotorua Lakes

PREPARED FOR

ENVIRONMENT BAY OF PLENTY

BY

APR CONSULTANTS LTD

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Glossary

Acronym	Explanation
BOP	Bay of Plenty (Region).
EBOP	Environment Bay of Plenty (Regional Council).
LOCMAP	Lake Okareka Catchment Management Action Plan.
LORRA	Lake Okareka Residents and Ratepayers Association.
Method 41	Refers to Method 41 of the BOP Regional Water and Land Plan – Development and implementation of Lakes Action Plans.
Method 42	Refers to Method 42 of the BOP Regional Water and Land Plan – Review of the necessity and application of 'Rule 11' to individual lake catchments.
RDC	Rotorua District Council.
Rule 11	Refers to Rule 11 of the BOP Regional Water and Land Plan (also known as 'section 9.4 rules') restricting the level of diffuse discharge of nutrients from land-use activities.
TAMTB	Te Arawa Maori Trust Board (now known as Te Arawa Lakes Trust).
TLI	Trophic Level Index – An indicator of lake water quality, calculated from four chemical and biological measures (chlorophyll a, water clarity, phosphorus level and nitrogen level).

ABSTRACT

This report presents the results of a project scoping exercise to improve the outcomes and process of developing long-term Action Plans to improve water quality in Rotorua lakes. The report was commissioned by Environment Bay of Plenty (EBOP) in response to possible issues with previous Lakes Action Plan processes. A range of recommendations is made to guide the development of subsequent Lake Action Plans. The key recommendation is to take a pragmatic approach which is appropriate to the scale and nature of actions to deal with remaining lake catchment and water quality issues.

EXECUTIVE SUMMARY

Introduction

Over the period 2003 to 2008, Lake Action Plans were developed by Environment Bay of Plenty (EBOP) for the following Rotorua lakes:

- Okareka (developed Apr 2003 to mid-2004).
- Okaro (developed Dec 2003 to Aug 2006).
- Rotoehu (developed Dec 2003 to late 2007).
- Rotorua and Rotoiti (developed Jan 2004 to Aug 2007 – finalised July 2009).
- Rotoma (developed Jul 2006 to Nov 2008 – approved November 2009).

Each of these Action Plans was developed through a Working Group/Working Party process involving community members and key stakeholders, as specified in Method 41 of the BOP Regional Water and Land Plan. While this approach has been generally successful in enhancing the level of community and stakeholder input into the Action Plan development process, it has also been found to have drawbacks. In particular, it has been identified that:

- The Action Plans took a long time to develop.
- Documents were poorly constructed and analysed.
- Staff turnover during these periods can cause mistrust with the community.
- Working Group processes take on a life of their own and raise non water quality issues or pet issues rather than real issues.
- There was limited community representation and capture by certain community members.
- The focus of plans was on issues not outcomes.

Over the coming years, Action Plans are scheduled to be developed for lakes Tarawera, Tikitapu (Blue Lake) and Okataina, and potentially also for Rerewhakaaitu, Rotomahana and/or Rotokakahi (Green Lake). A process for the Tarawera Action Plan was commenced in 2006 but was subsequently put on hold. This was partly due to insufficient agency staff time and resources to commit to the project, but also because the initial Draft Lake Tarawera Action Plan was predominantly focused on recreational issues rather than water quality improvements.

Project Brief and Methodology

This report presents the results of an independent project scoping exercise to improve the outcomes and process of developing Action Plans for improving long-term water quality in Rotorua lakes. The methodology involved a desktop review of existing action plans and interviews with key informants:

- (a) **Desktop review of existing action plans** – This was undertaken to identify key elements of the development process and content of the Plans. The purpose was to highlight commonalities and differences between the various Action Plans, documenting key features such as levels and types of community involvement and the scope of involvement of Working Groups (eg, terms of reference).
- (b) **Key informant interviews** – Contact details for a range of key informants were compiled with the assistance of EBOP staff. The list of informants comprised:
 - Key staff members from EBOP and RDC that have been involved in previous Action Plan processes.
 - Iwi representatives that have been involved in previous processes.
 - Industry representatives that have been involved.
 - Staff from other agencies that have been involved.

- A selection of representatives from community groups and landowners that have been involved.
- Members of the Rotorua Te Arawa Lakes Strategy Group.

The results from each of these tasks were fully considered by the consultants before formulating conclusions and recommendations.

Evaluation Results

Previous Action Plan processes were reviewed in relation to various criteria including timeliness, efficiency, community engagement and outcomes-focus. The outputs from the Action Plan processes were also reviewed, in terms of actions, timetable, costs and benefits, evaluation and report, and overall quality of documentation. Supplementing this review, key informants were questioned about their perceptions of the process to date and any suggestions they had for improving the process for subsequent Action Plans.

Key results from the desktop review and interviews are as follows:

- The differing levels of scale and complexity for each lake catchment are reflected in different Working Group sizes, the need for focus groups (ie, not warranted for smaller lake catchments) and the length and frequency of Working Group meetings. There was also variation in whether or not follow-up community meetings were held in addition to the initial launch meeting.
- The process timeline duration has been highly variable, ranging from one year for the pilot Lake Okareka Action Plan up to approximately four years for the Lakes Rotoehu and Tarawera Action Plans.
- In terms of outputs, the most common initiatives across all Action Plans are those that can be achieved relatively quickly and cost-effectively, including Environmental Programmes for riparian planting, retirement and fencing, and improvements to farming and forestry best-practice management. Nutrient limiting regulations are applicable in relation to each Action Plan and are part of the underlying regulatory framework. For most lake catchments, this is accompanied by investigations and negotiations around land-use change to reduce nutrient losses. Construction and/or enhancement of wetlands is a common theme across most Action Plans. The Lake Rotorua/Rotoiti Action Plan has a more urban-based set of actions, including stormwater system improvements and the development of community education resources.
- Key informant interviews revealed a range of views about the efficacy of the Lakes Action Plan processes to date. For example, some viewed the relatively long timeframes as a way to achieve good buy-in from the community and to provide sufficient time to understand and argue the underlying science. However, others felt that the longer timeframes were a drain on agency resources, resulted in Working Groups taking on a life of their own and led to 'capture' of the process by a small number of community members. There have also been some issues around multiple layers of governance when it comes to submission processes and the formal adoption of Lake Action Plans.

Framework and Guidelines for Developing Future Action Plans

Working Group Terms of Reference

On the basis of all available information, the opinion of this Consultant is that a high level of community-led participation is not necessarily merited. More focused engagement would likely be more effective for remaining Lakes Action Plan processes. A more appropriate goal of public participation is primarily to inform and educate. The emphasis should be less on participatory meetings and more on enabling written feedback on a Draft Action Plan (including through online submissions). Reasons why a community-led 'Working Group may not be appropriate include:

- Water quality issues for remaining lakes can be largely addressed through a specialist toolkit of measures such as in-lake treatments.
- Local community members already have a generally high level of vested interest in their local environment. Additional knowledge about lake water quality issues could be imparted through community workshops, brochures and newsletters. Separately from the Action Plans process, EBOP is working directly with farmers to achieve nutrient reductions.
- The remaining lake catchments have relatively small populations which can be effectively engaged through targeted community meetings and newsletters.
- The Working Group format has potential to drift from the core issue of addressing water quality issues into other matters such as recreational facilities, which are more appropriately addressed in other forums.

A key aspect of the recommendations is to re-interpret the 'Working Group' Terms of Reference and for EBOP to take a more directive approach to the Action Plan process.

Document structure and content

Prior to initiating a Working Group for each lake catchment, EBOP should be very clear about its initial expectations for what activities can be realistically undertaken to improve water quality. A complete Draft Action Plan should be developed by EBOP prior to commencement of Working Group meetings, and should be distributed at the initial meeting as part of the introductory material. There may be merit in developing a template approach, to assist timely production of the documents and to help focus Working Group discussions.

The initial Draft Action Plan, revised Draft Action Plan and final Draft Action Plan should be relatively concise documents that cover off core elements of Method 41 and good-practice strategic planning. The Action Plan document may be supplemented with additional scientific Working Papers, brochures and summary newsletter information, but only the core information should be in the Action Plan itself. Feedback from EBOP staff is that the detailed Working Papers are a useful reference that should be retained as a separate resource.

Public consultation and Action Plan adoption processes

A further issue that has emerged in recent years is the multiple layers of governance associated with the Lake Action Plans. According to a 'Health Check Report' compiled for the Rotorua Te Arawa Lakes Strategy Group by EBOP (18 September 2009), the process of adopting Lake Action Plans has been variable:

- The Lake Okareka Action Plan was first approved by the individual councils (EBOP and RDC) before being submitted to the Rotorua Lakes Strategy Joint Committee (June 2004).
- The Lake Rotoehu Action Plan was approved by the Rotorua Lakes Strategy Group (21 November 2007).
- The draft Lake Rotoma Action Plan was approved the Rotorua Lakes Strategy Group for public release.
- The Lake Rotorua/Rotoiti Action Plan hearings committee resolved that it: 'Recommends to the Rotorua Lakes Strategy Group that the Draft Lakes Rotorua and Rotoiti Action Plan be approved by partner agencies' (19 March 2009).
- The Lakes Rotorua and Rotoiti Action Plan (July 2009) was approved by the Rotorua Lakes Strategy Group and recommended for approval by partner organisations. It was subsequently ratified by the Te Arawa Lakes Trust, ratified with a review caveat by RDC and let to lie on the table by EBOP.

The opinion of this Consultant is that a pragmatic approach should be taken to the public consultation and formal submissions processes for Lake Action Plans. Draft and final Action Plans should be approved first by the Rotorua Te Arawa Lakes Strategy Group and then by individual partner agencies. This should not be an onerous or resource-intensive aspect of the process, so long as the Action Plan has been developed in a robust manner. Lake Action Plans are non-statutory documents that must be responsive to changing circumstances and emerging issues. If one or more parties fails to formally adopt a specific Action Plan, this should not prevent or delay the implementation of operational works programmes aimed at improving lakes water quality.

It is clear from this independent evaluation that EBOP has been the primary driver of Lake Action Plan processes, and this should be recognised in support of a more streamlined process.

Regulatory framework

An additional issue to come through is that much of the inter-stakeholder tension created through Lake Action Plan development processes can be attributed to Method 42 of the BOP Regional Water and Land Plan. This specifies that each Action Plan Working Group (comprising local community members, key stakeholders and agency representatives) must assist in reviewing the necessity and application of a nutrient cap for each lake catchment (ie, similar to Rule 11 of EBOP's Regional Water and Land Plan in relation to lakes Rotorua, Rotoiti, Okareka, Rotoehu and Okaro). If agreement is not reached on such a cap, then any land use or management change will remain solely on a voluntary stewardship approach for that lake catchment.

Regarding the above issue, if a general decision could be reached by the Rotorua Te Arawa Lakes Strategy Group and EBOP on the intent to introduce a nutrient cap for the catchments of all lakes that are exceeding their target Trophic Level Index (TLI), then the Lake Action Plan process could be simplified and made less contentious. This would create a regulatory foundation for all lake catchments, creating a firmer basis on which to develop individual Lake Action Plans.

Overall approach

Key elements of the overall approach are summarised as follows.

- (a) Carefully consider whether or not to have an Action Plan Working Group for each lake (ie, not all lakes may need Action Plans, or in some cases the Action Plan may simply be more straightforward to develop and implement).
- (b) Individual Action Plans should be developed over a maximum one-year timeframe.
- (c) A Draft Action Plan should be developed by EBOP prior to commencement of Working Group meetings.
- (d) The primary roles of the Working Group should be to review the Draft Action Plan, discuss alternative actions and community priorities, and encourage public feedback on a revised Draft Action Plan.
- (e) Working Group meetings should be facilitated by EBOP staff (or by a contracted consultant).
- (f) Working Group meetings should involve a series of no more than 2-3 well-defined workshop meetings with clear agendas and an iterative approach to decision-making.
- (g) Public feedback processes for Proposed Action Plans should be streamlined.
- (h) Draft and final Action Plans should be approved first by the Rotorua Te Arawa Lakes Strategy Group and then recommended for approval by individual partner agencies.
- (i) The monitoring, evaluation and review aspects of each Action Plan should be clearly defined, including a streamlined 9-10 year cycle for technical review and public submissions.

Details for each of these recommendations are described fully in the report.

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1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

This report presents the results of a project scoping exercise to improve the outcomes and process of developing Action Plans for improving long-term water quality in Rotorua lakes. The report was commissioned by Environment Bay of Plenty (EBOP) in response to issues with previous Lakes Action Plan processes including:

- They take a long time to develop.
- Poorly constructed and analysed documents.
- Staff turnover during these periods can cause mistrust with the community.
- Working Group processes take on a life of their own and raise non water quality issues or pet issues rather than real issues.
- Limited community representation and capture by certain community members.
- Focus on issues not outcomes.

Note that the issues above should be seen as a starting point only. Further perspectives on the positive and negative elements of previous Lakes Action Plan processes have been solicited as part of this scoping exercise. A summary of these perspectives is presented later in the document.

Both this document and the associated summary report are intended to be confidential to staff and Elected Members associated with the Rotorua Te Arawa Lakes Strategy Group and its constituent agencies, unless a decision is made to release these for the purpose of public transparency.

1.2 Background

To date, Lake Action Plans have been developed for the following:

- Lake Okareka (2004).
- Lake Okaro (2006).
- Lake Rotoehu (2007).
- Lakes Rotorua and Rotoiti (2009).
- Lake Rotoma (2009).

Lake Action Plans have not yet been developed for:

- Lake Tarawera (initiated with working group).
- Lake Tikitapu (Blue Lake) (working group to be initiated).
- Lake Okataina.
- Lake Rerewhakaaitu.
- Lake Rotomahana.
- Lake Rotokakahi (Green Lake).

Lake Action Plans are developed on the basis of Methods 41 and 42 of the BOP Regional Water and Land Plan (refer to Appendix One of this report). Whatever process and approach is used to develop subsequent Lake Action Plans must meet the intent of methods 41 and 42.

1.3 Method

As per the project brief, the key purpose of this exercise was to:

- Develop broad evaluation criteria.
- Undertake an analysis and identify issues and conclusions regarding the quality of current Action Plans (ie, Lake Rotoma, Lake Rotorua/Rotoiti and Lake Rotoehu).
- Undertake an evaluation of the quality of the Action Plan development process and identify issues and conclusions.
- Provide options for change to improve the outcomes achieved for lakes through Action Plans and how communities can better participate in their development.
- Create a framework and guidelines for undertaking the development of future Action Plans (at least two and possibly as many as six more Action Plans to be undertaken).

The methodology to achieve this consisted of a desktop review of existing action plans and interviews with key informants:

- (a) **Desktop review of existing action plans** – This was undertaken to identify key elements of the development process and content of the Plans. The purpose was to highlight commonalities and differences between the various Action Plans, documenting key features such as levels and types of community involvement and the scope of involvement of Working Groups (eg, terms of reference). The desktop review included consideration of all Working Group meeting notes, EBOP Working Papers, community newsletters and other base documents, as well as Nick Zaman's 2009 'Informal Review of the Development of Lake Action Plans' (11 pp).
- (b) **Key informant interviews** – Contact details for a range of key informants were compiled with the assistance of EBOP staff. The list of informants comprised:
 - Key staff members from EBOP and RDC that have been involved in previous Action Plan processes.
 - Iwi representatives that have been involved in previous processes.
 - Industry representatives that have been involved.
 - Staff from other agencies that have been involved.
 - A selection of representatives from community groups and landowners that have been involved.
 - Members of the Rotorua Te Arawa Lakes Strategy Group.

2.0 EVALUATION CRITERIA – COMPLIANCE AND GOOD PRACTICE

2.1 Methods 41 and 42 of the Regional Water and Land Plan

Whatever process and approach is used to develop Lake Action Plans, it must meet the intent of methods 41 and 42 of the BOP Regional Water and Land Plan (refer to Appendix One of this report). In summary, key aspects for compliance include:

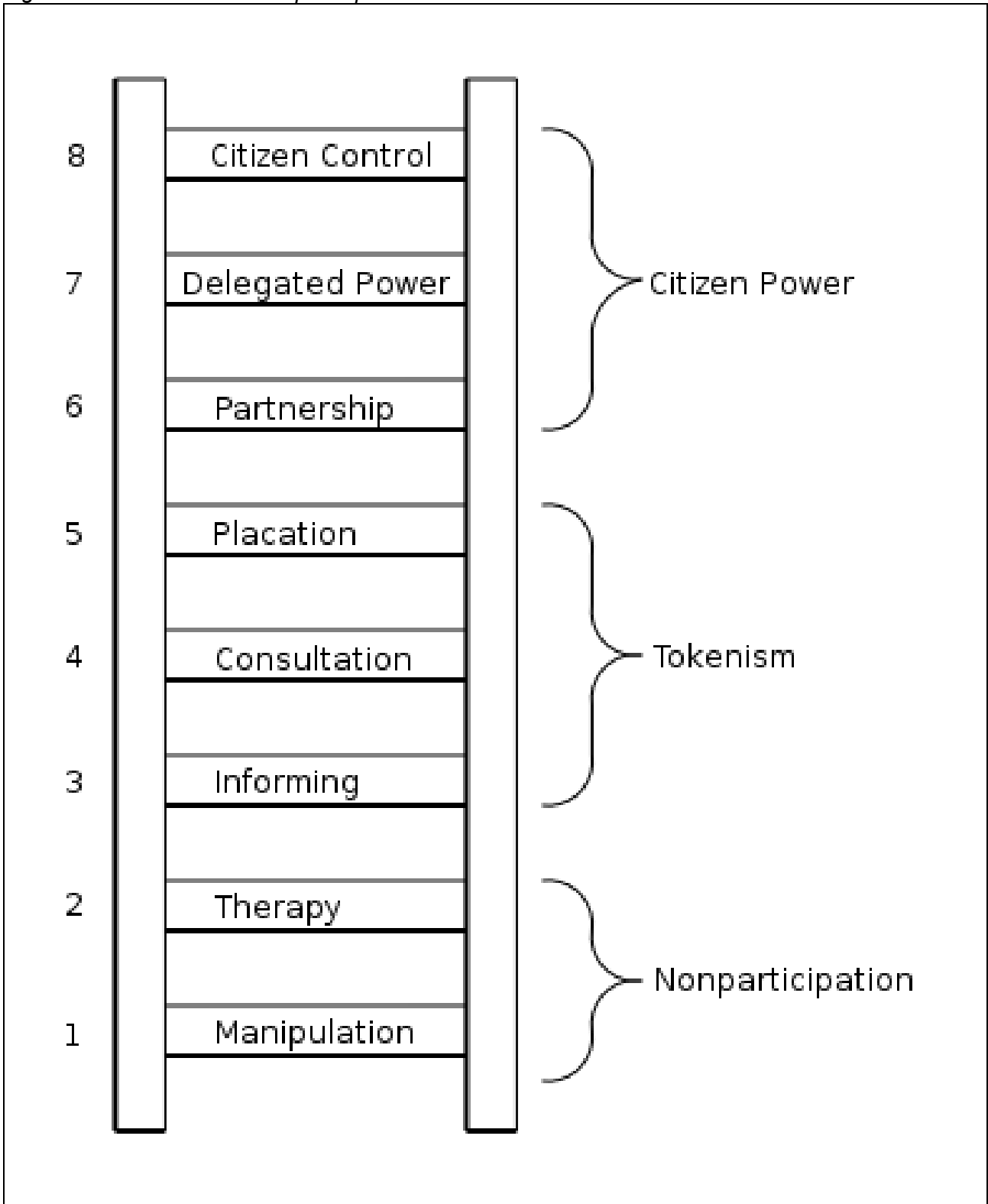
- Prioritising the development of action plans according to their Trophic Level Index (TLI).
- Quantifying the lake water quality problem and estimating the needed reduction in nitrogen and phosphorous.
- Establishing a timeline for developing an Action Plan for the lake catchment.
- Disseminating information and research findings to the community.
- Forming an Action Plan Working Group comprising appropriate parties from the individual catchment, including but not limited to Rotorua District Council, iwi, community groups, landowners and relevant resource management agencies and industry representative groups.
- Working with the Action Plan Working Group to identify action plans, outcome (TLI) targets and a timetable for implementing nutrient management and reduction options.
- Identifying the costs and benefits of different nutrient management and reduction methods.
- Working with the Action Plan Working Group to review the necessity and application of regulations under section 9.4 (ie, 'Rule 11) of the BOP Regional Water and Land Plan to the individual lake catchment.
- Include an evaluation and reporting element with the Action Plan.

2.2 Choosing appropriate levels and types of community involvement

Much has been written about the benefits of engaging communities in local decision-making processes, including the need to ensure local commitment to achieve sustainable local solutions. According to summary information on the Quality Planning website (www.qualityplanning.org.nz), consultation is a mandatory requirement in Resource Management Act (RMA) plan and policy development, review and change processes. Consultation requires a commitment to communicate effectively with individuals and groups with different values and concerns, and to take on board feedback. When undertaken effectively and early in plan development, consultation can increase community understanding, improve the quality and buy-in of the plan, and ideally result in fewer disputes and appeals in the long term. Note that the Local Government Act 2002 (as amended) also has specific requirements for consultation with communities – refer Part 6 (planning, decision-making and accountability, including use of the 'special consultative procedure').

A key diagram for illustrating the spectrum of community participation and non-participation is Arnstein's (1969) ladder of citizen participation (refer Figure 1). Arnstein argued that citizen participation is a categorical term for citizen power. Her article described societal power structures and how they interact when major decisions are being made.

Figure 1: Arnstein's ladder of participation



Source: Arnstein, Sherry R. "A Ladder of Citizen Participation," JAIP, Vol. 35, No. 4, July 1969, pp. 216-224. Website: <http://lithgow-schmidt.dk/sherry-arnstein/ladder-of-citizen-participation.html>.

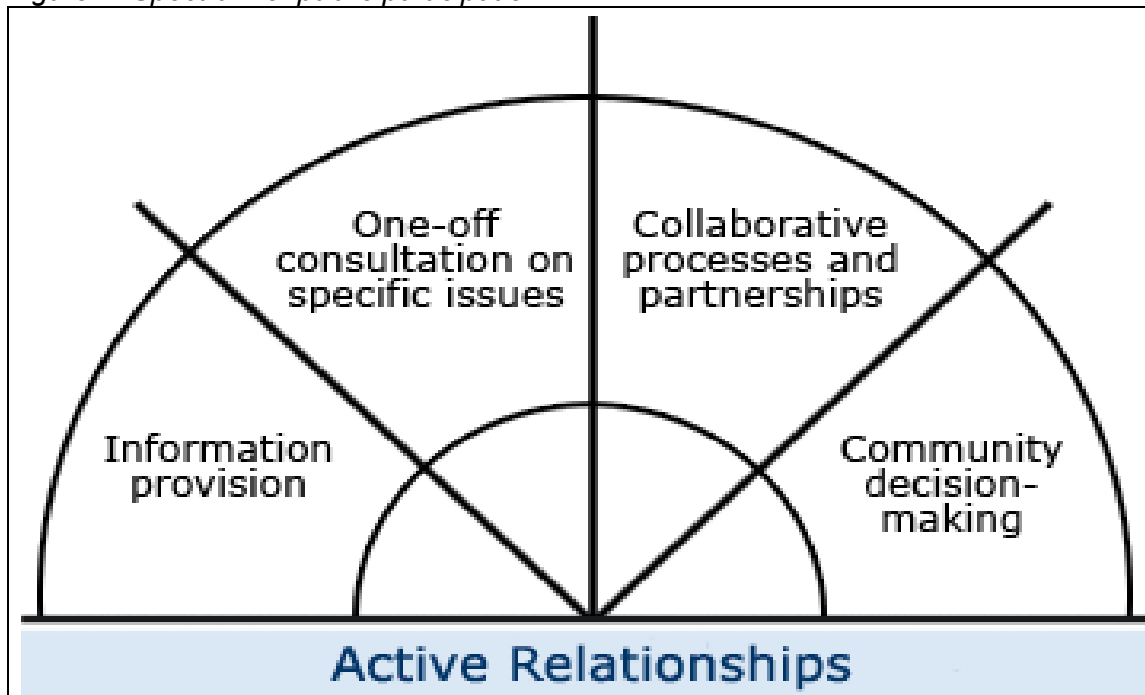
Since Arnstein's article in the late-1960s, the thinking and practice around citizen engagement has continued to develop. More recent variations on the concept of a 'ladder' or 'spectrum' of engagement are shown in Table 1 and Figure 2.

Table 1: A typology of participation

Typology	Characteristics of Each Type
1. Passive participation	People participate by being told what has been decided or has already happened. Information being shared belongs only to external professionals.
2. Participation by consultation	People participate by being consulted or by answering questions. Process does not concede any share in decision-making, and professionals are under no obligation to take on board people's views.
3. Bought participation	People participate in return for food, cash or other material incentives. Local people have no stake in prolonging technologies or practices when the incentives end.
4. Functional participation	Participation seen by external agencies as a means to achieve their goals, especially reduced costs. People participate by forming groups to meet predetermined objectives.
5. Interactive participation	People participate in joint analysis, development of action plans and formation or strengthening of local groups or institutions. Learning methodologies used to seek multiple perspectives, and groups determine how available resources are used.
6. Self-mobilisation and connectedness	People participate by taking initiatives independently to change systems. They develop contacts with external institutions for resources and technical advice they need, but retain control over how resources are used.

Source: Pretty, J. and Hine, R. (1999) 'Participatory Appraisal for Community Assessment: Principles and Methods', Centre for Environment and Society, University of Essex. Website: www.essex.ac.uk/ces/esu/community-participatory.shtm#3.

Figure 2: Spectrum of public participation



Source: Good Practice Participate website, accessed May 2010. Website reference: www.goodpracticeparticipate.govt.nz/levels-of-participation/index.html.

A key element of contemporary thinking about community engagement in decision-making is that the degree of participation depends crucially on what you are trying to achieve. In other words, 'more participation' is not necessarily merited in all cases, but should be taken into consideration as part of a broader conceptualisation of the decision-making process. Sometimes a more appropriate goal of public participation is primarily to inform and educate.

2.3 Initial thinking around compliance and good practice

Prior to becoming familiar with existing Lake Action Plans and interviewing key informants, the consultants derived a number of preconceptions about what options and recommendations would likely result from this scoping exercise. These are declared as follows, for the purpose of transparency. Based on the author's experience in a range of previous consultation processes and settings, along with guidance from the 'Good Practice Participate' website and the Quality Planning website, it is likely that the options and recommendations would focus on:

- Processes that balance meaningful community engagement with a desire to be timely and cost-effective throughout the Action Plan process. Note: This would likely involve a small number of public workshops involving participatory appraisal principles and tools, focusing on outcomes and possible actions (including possible actions by community members).
- Processes that limit the scope/terms of reference of Action Plan Working Groups, to mitigate the possibility of 'capture' around peripheral issues.
- Some standardisation and simplification of public communications (including background/research documents), community engagement processes and Action Plan documentation.

2.4 Evaluation criteria – compliance and good practice

As a basis for undertaking the desktop review of existing Action Plans, a set of evaluation criteria has been identified in order to help identify issues, commonalities and differences between the Action Plans. These are divided into 'process' and 'output' criteria as follows:

Table 2: Evaluation criteria

Process criteria	Output criteria
Compliance: <ul style="list-style-type: none"> – Information and research findings disseminated. – Action Plan Working Group formed. 	Compliance: <ul style="list-style-type: none"> – TLI targets identified. – Action plans identified (lake-specific). – Timetable for implementation. – Costs and benefits identified. – Review of regulations (section 9.4 of Regional Water and Land Plan). – Evaluation and reporting element.
Good practice: <ul style="list-style-type: none"> – Outcomes focused. – Appropriate level and types of community engagement. – Timeliness of the plan development process. – Efficient use of resources. 	Good practice: <ul style="list-style-type: none"> – Clear and concise documentation.

Source: Derived from information presented in sections 1 and 2 of this report.

The criteria above are used as the basis for the meta-analysis of existing action plans which follows.

3.0 OVERVIEW OF EXISTING ACTION PLANS

3.1 Introduction

Considerable information is available on the EBOP website regarding Rotorua's lakes and the development and outputs of the various Lakes Action Plan projects (refer www.envbop.govt.nz/Environment/Lake-information.aspx). On-line information is summarised as follows. The variable levels and types of information available for each lake reflect the range of approaches taken, the differing scale of the individual Action Plan development processes, and possibly also some variation due to personnel changes over the past 7-8 years. Note that at least some of the on-line information appears to out-of-date (for example, there is a reference to Action Plan processes for lakes Rotomahana and Rerewhakaaitu being scheduled to start in July 2008).

Table 3: Summary overview of relevant information on the EBOP website

Lake	Overview webpage	Report Card (2008 latest)	Lake Action Plan	Meeting minutes, newsletter and reports
Okareka	✓	✓	2003 Draft Working Paper.	<ul style="list-style-type: none"> – Working Party meeting minutes May 2003 to May 2006. – Focus Group meeting minutes Feb 2005. – Community meeting minutes Jan 2004, Jul 2004 and Jan 2005. – Newsletter and Community Updates Aug 2003 to Aug 2006.
Okaro	✓	✓	2006 Action Plan.	<ul style="list-style-type: none"> – Community meeting minutes Dec 2003. – Working Party meeting minutes Apr 2004 to Aug 2006.
Rotoehu	✓	✓	2007 Action Plan.	<ul style="list-style-type: none"> – Community meeting minutes Dec 2003 and Jun 2006. – Working Party meeting minutes Mar 2004 to Feb 2007. – Newsletter August 2007 (only).
Rotorua/Rotoiti	✓	✓	Reference only – Proposed Action Plan is not available on-line.	<ul style="list-style-type: none"> – Community meeting minutes (Plan Launch) Jan 2004. – Working Party meeting minutes May 2004 to Feb 2007. – In-lake focus group meeting minutes Jul 2004 to Feb 2007. – Urban focus group meeting minutes Jul 2004 to Sept 2005. – Land-use focus group meeting minutes Sept 2004 to Oct 2006. – Newsletter Sept 2003 to Aug 2007.
Rotoma	✓	✓	2009 Action Plan.	<ul style="list-style-type: none"> – Working Party meeting minutes Jul 2006 to Nov 2008.
Tarawera	✓	✓	n/a	<ul style="list-style-type: none"> – Working Party meeting minutes May 2006 to Sept 2006. – Newsletter Sept 2006 (only).
Tikitapu (Blue Lake)	✓	✓	n/a	– n/a
Okataina	✓	✓	n/a	– n/a
Rerewhakaaitu	✗	✓	n/a	– n/a
Rotomahana	✗	✓	n/a	– n/a
Rotokakahi (Green Lake)	✗	✓	n/a	– n/a

Source: Derived from information on EBOP website.

Note: 'n/a' means not applicable.

3.2 Context – TLI status and targets for the Rotorua Lakes

Lake Action Plans are developed on the basis of Methods 41 and 42 of the BOP Regional Water and Land Plan (refer Appendix One of this report). Accordingly, the 'degraded' lakes of Okareka, Rotoehu, Okaro, Rotorua and Rotoiti were scheduled to commence their Action Plan development processes from early-mid 2003. Other Action Plan processes are prioritised according to the assessed risk of each lake exceeding its TLI target, and other water quality monitoring information. Prioritisation is also determined in conjunction with the co-management partners of the Strategy for the Lakes of the Rotorua District. Table 4 below summarises the current and target TLI status for each lake, alongside its associated Lake Action Plan development timeframe.

Table 4: Lakes TLI status and Action Plan development timeframe

Lake	Lake Action Plan development timeframe	TLI 2004	TLI 2005	TLI 2006	TLI 2007	TLI 2008	TLI 2009	Target TLI (Objective 11)	Lake Type (based on TLI 2005)	Trend
Okareka	Apr 2003 to mid-2004 (pilot Action Plan)	3.2	3.3	3.3	3.3	3.3	3.3	3.0	Mesotrophic (stable/unstable)	No change
Okaro	Dec 2003 to Aug 2006	5.5	5.6	5.5	5.5	5.3	5.3	5.0	Supertrophic (very sick)	Appears to be improving
Rotoehu	Dec 2003 to late 2007	4.6	4.6	4.5	4.6	4.5	4.5	3.9	Eutrophic (sick)	Appears unlikely to change
Rotorua	Jan 2004 to Aug 2007	4.9	5.0	4.9	4.8	4.8	4.7	4.2	Eutrophic (sick)	Ni change
Rotoiti	Jan 2004 to Aug 2007	4.3	4.5	4.3	4.1	4.0	3.9	3.5	Eutrophic (sick)	Getting worse
Rotoma	Jul 2006 to Nov 2008	2.5	2.5	2.5	2.5	2.6	2.6	2.3	Oligotrophic (healthy)	Steady
Tarawera	May 2006 ongoing	2.9	2.9	2.9	2.9	2.9	2.9	2.6	Oligotrophic (healthy)	No change
Tikitapu (Blue Lake)	Pending	3.2	3.2	3.1	3.0	3.0	3.0	2.7	Oligotrophic (healthy)	Probably getting worse
Okataina	To be determined	3.0	3.0	2.9	2.8	2.8	2.8	2.6	Oligotrophic (healthy)	Possibly getting worse
Rerewhakaaitu	To be determined	3.4	3.4	3.5	3.5	3.6	3.7	3.6	Mesotrophic (stable/unstable)	Appears unlikely to change
Rotomahana	To be determined	3.7	3.8	3.9	3.9	3.9	4.0	3.9	Mesotrophic (stable/unstable)	Steady
Rotokakahi (Green Lake)	To be determined	3.5	3.3	3.4	3.5	3.8	4.0	3.1	Mesotrophic (stable/unstable)	Appears to be getting worse

Sources: EBOP (2006) 'Rotorua Lakes Protection and Restoration Action Programme', presentation to Lake Tarawera Working Party; Tropic Level Index – web page; TLIs and targets were verified/updated from the EBOP website and staff. Note that the TLI figures relates to a three-year moving average. Column 2 (Action Plan timeframe) is sourced in other sections of this report. Trend column is from 2008 Lakes Report Cards.

3.3 Context –Lake catchment populations

A further piece of background context for the Action Plan development process is the size of the local population catchment for each lake. In the case of Lakes Rotorua and Rotoiti, the local population is substantial, with an attendant requirement to be more inclusive in involving the general public and key stakeholders. For other lakes there are localised residential settlements and rural landowners that are more clearly defined and targeted. Table 5 below summarises the approximate resident population for each lake catchment.

Table 5: Lakes population catchments

Lake	Approximate population catchment	Additional information
Okareka	585	The catchment hosts a village, about ten large farms, and large areas of native bush on private land, public land and Maori trust land.
Okaro	50	Small catchment hosting dairy, sheep & beef and deer farms. A popular water skiing location.
Rotoehu	93	Maori landowners and small communities around the lake (eg, Otautu Bay, Kennedy Bay).
Rotorua and Rotoiti	57,700 + 1,647	
Rotoma	258	
Tarawera	267	
Tikitapu (Blue Lake)	n/a	Catchment is almost all native bush and forestry.
Okataina	n/a	Remote, with limited access and surrounded by native bush and scrub.
Rerewhakaaitu	231	
Rotomahana	135	
Rotokakahi (Green Lake)	n/a	

Sources: Approximate catchment population comes from the Rotorua Lakes Report Cards 2008. Additional information is from the EBOP website (accessed 1 June 2010).

3.4 Overview of Lake Action Plan development processes

3.4.1 Introduction

This section provides an overview of the 'process' elements of each of the existing Lake Action Plans (including Lake Tarawera, whose process has been initiated but not yet completed). Key summary information is provided for each Action Plan in approximate chronological order of development, being mindful that there was considerable overlap in the processes. For each Action Plan, the process is described under specific sub-headings as follows:

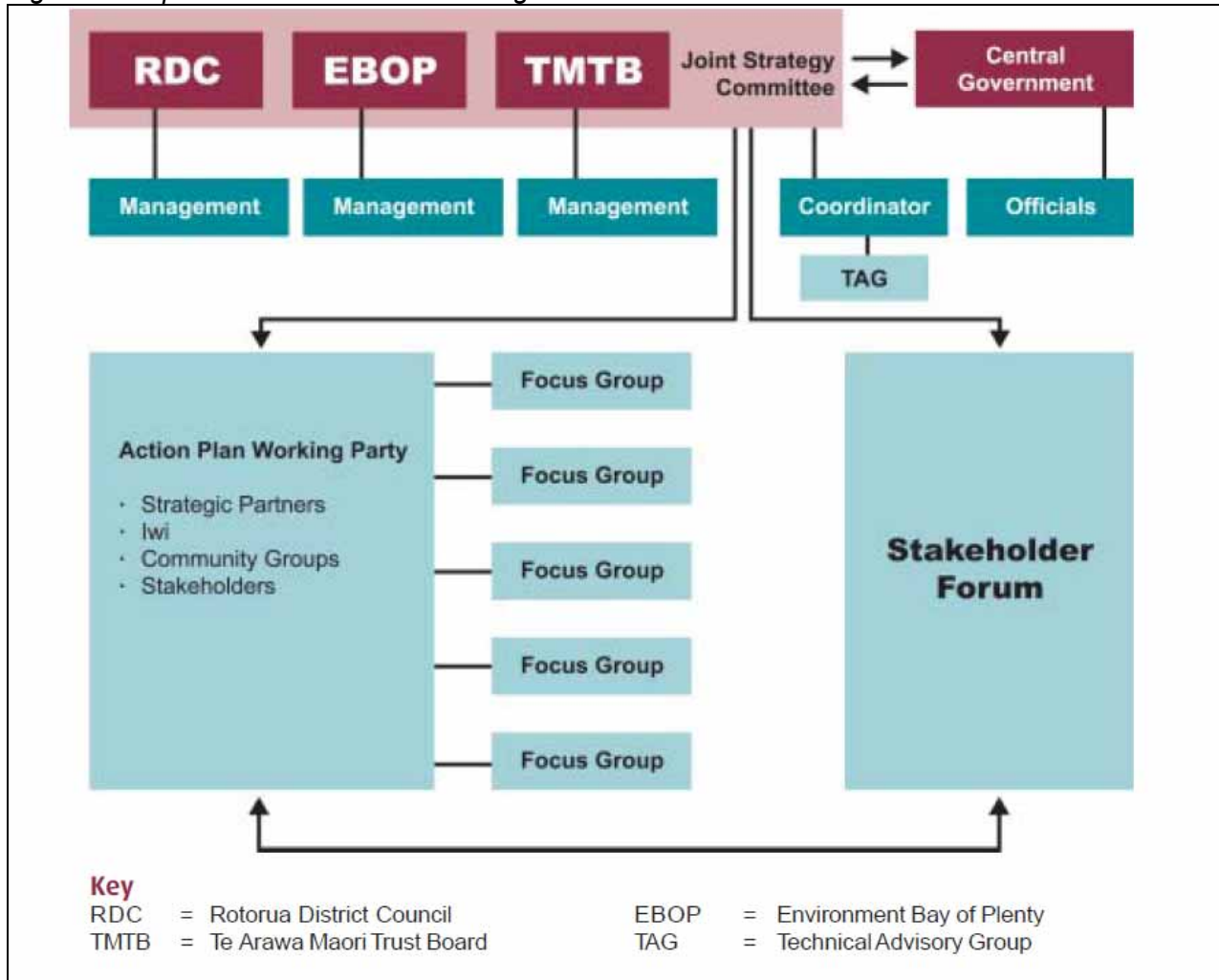
- Background information and research – What information and research findings were disseminated, and how this was achieved.
- Action Plan Working Group – An overview of the membership of each Working Group, its duration, meeting frequency and overall effectiveness (on the basis of published information). Where possible, an attempt has been made to identify which organisation or sector is being represented by each person. Where there are information gaps, the members are likely either community members, local landowners or hapu representatives.
- Outcomes focused – An initial indication of whether or not the process stayed on track in terms of addressing outcomes rather than being captured by lower-level issues.
- Community engagement – An overview of the level and types of community involvement in developing each Action Plan.
- Timeliness – The duration and efficiency of each Action Plan development process.
- Efficiency – An initial assessment of the extent to which resources were used effectively, including staff time, Working Group time, community input and other resources.

At the end of this section there is a summary table that provides a high-level overview of Lake Action Plan processes to date.

3.4.2 Process diagram

A diagram of the 'implementation framework' for the Action Plan process is contained in various sources including Newsletter # 2 of the Rotorua/Rotoiti Action Plan process (April 2004). Each Working Party is accountable to the Joint Strategy Committee and can be supported by one of more Focus Groups (ie, sub-committees). The Focus Groups can also call on external support including additional community members. From around 2003/04, science aspects of the processes were also informed by Technical Advisory Groups (TAGs).

Figure 3: 'Implementation framework' diagram



Source: Newsletter # 2 of the Rotorua/Rotoiti Action Plan process (April 2004).

3.4.3 Overview of Lake Action Plan development processes

A detailed overview of the Lake Action Plan development processes is contained in Appendix Two. Key aspects are summarised in the table below. This reveals:

- The differing levels of scale and complexity for each lake catchment are reflected in different Working Party sizes, the need for focus groups (ie, not warranted for smaller lake catchments) and the length of Working Party meetings. There was also variation in whether or not follow-up community meetings were held in addition to the initial launch meeting.
- The process timeline duration has been highly variable, ranging from one year for the pilot Lake Okareka Action Plan up to approximately four years for the Lakes Rotoehu and Tarawera Action Plans.
- In addition to the points above, it should be noted that the Lakes Rotorua and Rotoiti Action Plan was left to lie on the table by EBOP, and that the RDC adoption of this Action Plan was accompanied by a review caveat.

Table 6: Overview of Lake Action Plan development processes to date

	Okareka	Okaro	Rotoehu	Rotorua/ Rotoiti	Rotoma	Tarawera
Initial community meeting/ launch	Yes	Yes	Yes	Yes	Not clear from available documents	Not clear from available documents
Draft Working Papers	Yes	Yes	Yes	Yes	Yes	Yes
Working Party Terms of Reference	Initial version	Initial version	Refined version	Refined version	Refined version	Refined version
Selection of chairperson	Appointed by EBOP	Appointed by EBOP	Shared amongst attending members	Nominated and elected at initial community launch meeting	Nominated and elected at initial Working Party meeting	Nominated and elected at initial Working Party meeting
Discussion about representation gaps	No (dealt with prior to initial W/P meeting)	Yes	Yes	Yes	Yes	Yes
Focus groups	Minor (bush settlement/ subdivision group only)	No	No	Yes – Substantial use of focus groups	No	No
'Rule 11' recommendations	Led by EBOP	Led by EBOP	Led by EBOP	Led by EBOP	Led by EBOP	Led by EBOP
Community feedback meeting(s)	Two subsequent community meetings	Not clear from available documents	Not clear from available documents	Not clear from available documents	Not clear from available documents	Not clear from available documents
Community information	Newsletters and progress updates	Not clear from available documents	Newsletters and progress updates	Newsletters and progress updates	Newsletters and progress updates	Initial newsletter only?
Process timeline	Apr 2003 to mid-2004 (one year)	Dec 2003 to Aug 2006 (2 ½ years)	Dec 2003 to late-2007 (four years)	Jan 2004 to Aug 2007 (3 ½ years), followed by an extended approval process	Jul 2006 to 2009 (three years)	May 2006 – ongoing (four years to date)
Number of Working Party meetings	5	7	8	14	8	3 recorded
Average meeting duration	2-3 hours	1-2 hours	1-2 hours	2-3 hours	1 to 1 ½ hours	1-2 hours
Working Party size (APPROX)	34	20	12	28	20	25
EBOP support staff*	9	6	7	10	9	5
RDC support staff*	5	5	3	7	3	2

Source: Derived from Action Plan Working Party Minutes.

Note: EBOP and RDC support staff were a core part of the process but were explicitly excluded from formal membership of the Working Party, to ensure clarity of roles.

3.4.4 Overview of Lake Action Plan adoption processes

A separate feature of the Lake Action Plans which is of interest to EBOP and its partner agencies is the formal adoption process. According to a 'Health Check Report' compiled for the Rotorua Te Arawa Lakes Strategy Group by EBOP (18 September 2009), the process of adopting Lake Action Plans has been variable:

- The Lake Okareka Action Plan was first approved by the individual councils (EBOP and RDC) before being submitted to the Rotorua Lakes Strategy Joint Committee (June 2004).
- The Lake Rotoehu Action Plan was approved by the Rotorua Lakes Strategy Group (21 November 2007).
- The draft Lake Rotoma Action Plan was approved the Rotorua Lakes Strategy Group for public release.
- The Lake Rotorua/Rotoiti Action Plan hearings committee resolved that it: 'Recommends to the Rotorua Lakes Strategy Group that the Draft Lakes Rotorua and Rotoiti Action Plan be approved by partner agencies' (19 March 2009).
- The Lakes Rotorua and Rotoiti Action Plan (July 2009) was approved by the Rotorua Lakes Strategy Group and recommended for approval by partner organisations.

3.5 Overview of Lake Action Plan development outputs

3.5.1 Introduction

This section provides an overview of the 'output' elements of each of the existing Lake Action Plans. For each Action Plan, the outputs are described under specific sub-headings as follows:

- TLI targets – Summary of the current TLI level and identified target.
- Actions – Summary overview of specific action items identified for each lake catchment.
- Timetable – Summary of the timetable for implementation of the Lake Action Plan.
- Costs and benefits – Overview of the costs and benefits identified for each Lake Action Plan.
- Evaluation and reporting – Overview of the ongoing evaluation and reporting element for each Lake Action Plan.
- Documentation – A subjective assessment by the author regarding the structure and presentation of each Lake Action Plan.

At the end of this section there is a summary table that provides a high-level overview of Lake Action Plan 'outputs' to date.

Much of the information from this section was sourced in the first instance from the EBOP website summary information (keyword: 'Lakes water quality') and secondarily from the published Action Plans themselves. Supplementary information was sourced from Working Party Minutes and other sources.

Note that the issue of quantifying costs and benefits for remaining lakes has been considerably addressed by recent research, including Suzie Greenhalgh's (Landcare Research) 2009 report titled 'Assessment of Interventions for the Rotorua Lakes'.

3.5.2 Overview of contributing factors and steps to improve lakes water quality

Table 7 below gives a high-level overview of lake-specific water quality problems and steps that are being taken (primarily by EBOP and RDC) to improve the water quality. Note that this information has not been independently verified, and some aspects appear to be out of date or incorrect. The same applies to information in the pages that follow, from which the majority has been sourced from the EBOP website relating to lakes water quality and Action Plans. Note: An alternative Action Plans overview table is provided in a later section of this report.

Table 7: Contributing factors and steps to improve water quality

Lake	Water quality problems	Steps to improve water quality
Okareka	Moderate risk of cyanobacterial blooms.	<ul style="list-style-type: none"> – Action Plan operational. – Sewerage reticulation. – Constructed wetlands. – Treatment of hypolimnetic water with flocculants to remove phosphorus. – Environmental programmes for farmers. – Land use change to lower nutrient export.
Okaro	Severe cyanobacterial blooms (alternates between blue-green and green algal). Previous scientific reports dating back to 1966 describe Lake Okaro as having 'clear water' with a pH of 7. Today the lake has a very low clarity and a surface water pH in excess of 8.	<ul style="list-style-type: none"> – Action Plan operational. – Chemical flocculant trials, construct wetland and riparian retirement.
Rotoehu	Severe cyanobacterial blooms (have been more persistent since an increase in nutrients in 1993). 2003/04 summer had no cyanobacterial blooms, but a large bloom returned in the 2004/05 summer along with a large hornwort infestation.	<ul style="list-style-type: none"> – Action Plan process under way. Riparian retirement programme. Constructed wetlands. Treatment box to remove stream nitrate. Hornwort harvesting trials to remove nutrients.
Rotorua	Experience water quality decline between 1978 and 1983. Foam (associated with kirchneriella algae species). Isolated blooms of nuisance algae. Moderate risk of cyanobacterial blooms.	<ul style="list-style-type: none"> – Action Plan process underway. – Rotorua District Council diversion of treated sewage to land disposal in 1991, and further improvements in progress. – Riparian retirement since 1970 as part of Kaituna Catchment Control Scheme. – Diversion of nutrient rich spring flows investigated. Flocculant dosing of nutrient-rich streams. Stormwater upgrades. Environmental Programmes.
Rotoiti	Severe cyanobacterial blooms in Okawa Bay (have become more persistent in past few years). Isolated blooms in easter lake area. Receives nutrient rich water from Lake Rotorua (~ 72% nutrients are from Rotorua). Massive algal bloom in early 2003.	<ul style="list-style-type: none"> – Action Plan process under way. Riparian retirement. Sewage reticulation for lakeside settlements. Diversion of inflow from Ohau Channel down the Kaituna River.
Rotoma	None. Low risk of cyanobacterial blooms.	<ul style="list-style-type: none"> – Action Plan process beginning.
Tarawera	Occasional cyanobacterial blooms. Bacterial issues from septic tanks around some lakeshore areas.	<ul style="list-style-type: none"> – Action Plan process beginning. Land use change to lower nitrogen and phosphorus export encouraged. Planning for future sewage reticulation.

Lake	Water quality problems	Steps to improve water quality
Tikitapu (Blue Lake)	Probable lake water decline from septic tanks from camping ground and public amenities. Low risk of cyanobacterial blooms.	– Sewerage reticulation as part of the Lake Okareka scheme. Action Plan process beginning.
Okataina	None – Low risk of cyanobacterial blooms. Possible water quality degradation that could come from lake level changes or other natural fluctuations.	– Action Plan process beginning.
Rerewhakaaitu	Risk of cyanobacterial blooms during summer where lake is shallow and calm. Water quality fluctuations noted in the past.	– Local projects undertaken in catchment with landowners. Trials of treatment boxes to remove nitrogen from streams. Phosphorus-absorbing socks in the Mangakino Stream.
Rotomahana	Occasional cyanobacterial blooms.	– No action at this time, until July 2008.
Rotokakahi (Green Lake)	Moderate risk of cyanobacterial blooms. Water quality is lower than in the 1950s, but there has been no discernible change since 1970/71.	– Actions to improve lake water quality to be negotiated with lake owners.

Source: Adapted from summary table on EBOP website (keyword: 'Lake water quality'), accessed 1 June 2010.

Note: Some of the actions listed in this table were already under way or in place prior to the development of an Action Plan.

3.5.3 Overview of Lake Action Plan development outputs

A detailed overview of Lake Action Plan development outputs is contained in Appendix Three. Key aspects are summarised in the table below. This reveals that:

- The most common initiatives across all Action Plans are those that can be achieved relatively quickly and cost-effectively, including Environmental Programmes for riparian planting, retirement and fencing, and improvements to farming and forestry best-practice management.
- Nutrient limiting regulations are applicable in relation to each Action Plan and are part of the underlying regulatory framework. For most lake catchments, this is accompanied by investigations and negotiations around land-use change to reduce nutrient losses.
- Construction and/or enhancement of wetlands is a common theme across most Action Plans.
- The Lake Rotorua/Rotoiti Action Plan has a more urban-based set of actions, including stormwater system improvements and the development of community education resources.

Table 8: Overview of Lake Action Plan outputs (ie, action items)

	Okareka	Okaro	Rotoehu	Rotorua/ Rotoiti	Rotoma
In-lake and stream treatments:					
Flocculants	Yes	Yes	Pending	Yes	
Wetlands		Yes	Yes	Yes	Yes
Water flow diversions				Yes	
Sewerage upgrades:					
OSET				Yes	Yes
Reticulation	Yes			Yes	Yes
Environmental programmes:					
Riparian planting/ retirement	Yes	Yes	Yes	Yes	
Riparian fencing		Yes	Yes	Yes	
Stormwater upgrades				Yes	
Biosecurity:					
Weed harvesting			Yes		
Regulation:					
Nutrient limiting regulations	Yes	Yes	Yes	Yes	Yes
Stewardship:					
Farming Best Practice	Yes	Yes	Yes	Yes	Yes
Land use change negotiations and investigations	Yes		Yes	Yes	Yes
Education resources				Yes	

Source: Derived from Action Plans, Report Cards 2008 and other on-line information.

3.5.4 Other lakes

While the remaining Rotorua lakes do not yet have Action Plans, the EBOP website lists a number of possible actions for water quality improvements in specific lakes. These are described as follows. The information has been sourced from EBOP's website (accessed 1 June 2010) and the on-line 2008 Lakes Report Cards.

TLI targets

Following public consultation during 2000-2001, the long-term water quality goals for remaining lakes were also set as follows (refer table below). As per Method 41 of the Regional Water and Land Plan, these TLIs and other lake quality monitoring data have been assessed to provide a scientific basis for prioritisation. Where monitoring identifies that a lake exceeds its TLI level by 0.2 units for two consecutive years, this serves as a trigger point for the development of a Lake Action Plan. Supplementary information is also monitored in terms of water temperature, dissolved oxygen and other aspects. On the basis of this monitoring, any other lakes may also have Action Plans developed for them. The decision on whether or not to proceed with others appears to be largely at the discretion of EBOP and the Rotorua Te Arawa Lakes Strategy Group. If Action Plans are deemed necessary, the order of development would be prioritised through consultation with the other Lakes Strategy partners (particularly RDC and Te Arawa Lakes Trust).

The timeline for initiating the water quality risk assessment described above is listed in Method 41 as Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi and Rotomahana, in that order (all to be initiated during 2005). This does not necessarily seem to imply that the lakes are listed in order of indicative water quality risk.

Table 9: Lakes TLI status and targets for remaining lakes

Lake	Lake Action Plan development timeframe	TLI as at 2005	Current TLI (three-yearly average to 2009)	Target TLI (Objective 11)	Lake Type (based on TLI 2005)
Tarawera	3 May 2006 - ongoing	2.9	2.9	2.6	Oligotrophic (healthy)
Tikitapu (Blue Lake)	Pending	3.2	3.0	2.7	Oligotrophic (healthy)
Okataina	To be determined	3.0	2.8	2.6	Oligotrophic (healthy)
Rerewhakaaitu	To be determined	3.4	3.7	3.6	Mesotrophic (stable/unstable)
Rotomahana	To be determined	3.8	4.0	3.9	Mesotrophic (stable/unstable)
Rotokakahi (Green Lake)*	To be determined	3.3	4.0	3.1	Mesotrophic (stable/unstable)

Source: Columns 3, 5 and 6 are from EBOP (2006) 'Rotorua Lakes Protection and Restoration Action Programme', presentation to Lake Tarawera Working Party. Column 5 (Target TLI) was verified/updated from the EBOP website and other background sources. Column 2 (Action Plan timeframe) is sourced in other sections of this report. Column 4 (Current TLI (three-yearly average to 2009)) is sourced from EBOP website (keyword: 'Lake water quality'), accessed 1 June 2010.

Note: * Another aspect of the Green Lake to keep in mind in relation to Action Plan development is its ownership status. Lake Rotokakahi is in private Māori ownership and is considered tapu. Public swimming and boating on the lake is not permitted.

Possible actions

While Action Plans have not been completed for the above lakes, according to the EBOP website (accessed 1 June 2010), current and prospective actions associated with improving water quality in each lake are summarised as follows.

Table 10: Current and prospective actions for improving water quality in other Rotorua lakes

Lake	Current actions	Possible actions
Tarawera*	<ul style="list-style-type: none"> – Action Plan Working Party established early 2006. – RDC District Plan 'Lakes A Zone' (recognising landscape values and natural hazard risks). – New rules for high-tech on-site effluent treatment as part of the reviewed OSET Regional Plan (requirement to reticulate or upgrade all septic tanks near the lake by 2014). – RDC has inspected all septic tanks in Council reserves. 	<ul style="list-style-type: none"> – Environmental Programme negotiations and agreements. – Regulation to limit discharge of N and P from land-use. – Land use change into bush settlements or alternative crops.
Tikitapu (Blue Lake)	<ul style="list-style-type: none"> – Upgraded recreational facilities. 	<ul style="list-style-type: none"> – Bush covenants. – Wastewater reticulation and pipe out of the catchment. – P-flocculants.
Okataina		<ul style="list-style-type: none"> – Recreational ban on powerboats and diving. – Covenants on private land. – Pest control. – Compare lake level changes to water quality changes, to try and detect any correlation.

Lake	Current actions	Possible actions
		<ul style="list-style-type: none"> – Assess human-induced nutrient sources to the lake: livestock grazing to the south and west of the lake. – Determine septic tank inputs from the campground and the lodge. – Consider introducing a Rule 11 type plan variation to control nitrogen and phosphorus discharges to the lake. – Monitor nutrient releases from lakebed sediments during autumn. – Action Plan development (currently delayed).
Rerewhakaaitu	<ul style="list-style-type: none"> – Ongoing riparian fencing and retirement on farmland. – Groundwater investigation. – Phosphorus removal from streams. – Nutrient management trials. – Ongoing water quality monitoring. 	<ul style="list-style-type: none"> – Stream-edge protection – Awaroa and Mangakino streams. – Wetland planting. – Nutrient management trials.
Rotomahana	<ul style="list-style-type: none"> – Weed removal and weed cordons. – Mobile boat-washing facility. – Lake margins are fully protected from livestock with vegetation buffer-zones. – Protection of geothermal resources through the Regional Water and Land Plan. 	<ul style="list-style-type: none"> – Action Plan development (currently delayed – subject to funding and staff resources).
Rotokakahi (Green Lake)	<ul style="list-style-type: none"> – Southern edge of lake is now planted and fenced off from livestock. – Initial contact (only) between EBOP and Maori landowners regarding lake water quality monitoring. 	<ul style="list-style-type: none"> – To discuss with the Maori landowners a possible process for creating a Lake Rotokakahi Action Plan. – Possible nutrient rules would be discussed during any future Action Plan process.

Sources: 2008 Lake Report Cards and EBOP website (keyword: 'Lake water quality'), accessed 1 June 2010.

Note: * Due to the high level of influence from groundwater, management actions for the restoration of adjacent lake catchments should have a flow-on effect in reducing nutrient loads to Lake Tarawera.

4.0 RESULTS FROM KEY INFORMANT INTERVIEWS

Supplementing the preceding desktop review, interviews were undertaken by the consultant with a range of key informants. The interviewees were selected on the basis of Method 41 of the BOP Regional Water and Land Plan (ie, Action Plan Working Group composition):

- Key staff members from EBOP and RDC that have been involved in previous Action Plan processes.
- Iwi representatives that have been involved in previous processes.
- Industry representatives that have been involved.
- Staff from other agencies that have been involved.
- A selection of representatives from community groups and landowners that have been involved.
- Members of the Rotorua Te Arawa Lakes Strategy Group.

All interviewees were assured of anonymity, so that they would feel free to be open and honest about their opinions of the Action Plan processes to date. The intention was to solicit a range of views on the success or otherwise of the Action Plan processes and outcomes. Key questions asked were similar to the following:

Q1: How effective would you say the process was in terms of achieving the objectives of the Action Plan? What went well? What did not go well?

Q2: What suggestions do you have for EBOP to improve the process for subsequent Lake Action Plans?

A separate confidential report has been compiled by the consultant from interview notes. The following summary of key feedback is based around pre-identified issues with previous Lakes Action Plan processes. Note that at the time of submitting this report 3-4 interviews remained outstanding. These were predominantly in relation to community members and industry (dairy and forestry) representatives. Hence, the predominant feedback below is from EBOP and RDC staff members that had been involved in past Action Plan processes. Note also that specific comments from members of the Rotorua Te Arawa Lakes Strategy Group have been included below.

4.1 Timeframes for Action Plan development

EBOP and RDC staff

Positive about longer timeframes

- Processes weren't too bad. Consumed quite a lot of time, but the upside is that there was reasonably good buy-in from the community – gave them time to understand the science, and feel like they had input. Example of Rotoehu – might otherwise have missed out on some ideas (eg, bio-treatment – someone had seen some information about this).
- To me the Action plans were a vehicle to bring the parties together to hopefully understand the science and issues and together agree a solution. Better than someone forcing it down on you. They then talked to each other with Council as a bystander.

Negative about longer timeframes

- The current timeframe for producing an operative document is three years or more. This is unsatisfactory for a number of reasons including: community expectations, lake quality deteriorating in the interim, access to Crown funding put at risk, and increased cost to fix the problem as actions or interventions are pushed out and delayed.

- In my opinion the current Action Plan process is overly long, relies too much on the Working Party process, is not managed efficiently or effectively from within Environment Bay of Plenty; is not achieving buy-in from the local communities and results in repeated debate and disagreement over the same issues.
- Don't have the resources – staff are stretched.
- EBOP is holding the pen. Working Party needs a clear end-point. Action Plans shouldn't take more than one year to develop.
- Each process should take 1 to 1 ½ years max.
- LGA Special Consultative Procedure – why are we using this? Classic example is the Rotorua/Rotoiti Action Plan – has taken 5 years and then not adopted by EBOP. This was due to lobbying at the end of the process by the Lakes Water Quality Society – targets not ambitious enough – the Action Plan set a more achievable target. Also because not a good link between the Joint Strategy Group and EBOP.
- SCP formal hearings and submissions = unnecessary. Just draft up an Action Plan and ask for comment. Save the process getting off track (eg, around navigation safety bylaws, lakeside rubbish bins, etc).
- Public consultation – Method 41 of the Regional Water and Land plan requires that 'information and research findings are disseminated to the community'. The Plan does not specify at what stage in the process this should occur or state that active-consultation is required. In practice an extensive consultation process has developed in relation to the development of Action Plans, including, in some cases, a public hearing at which submissions are presented to a Hearing Panel from the Rotorua Lakes Strategy Group. This form of consultation process does not appear to be adding-value to achieving the ultimate goal of improved water quality in the Rotorua Lakes, and given that Action Plans are non-statutory documents this level of formal consultation seems excessive and adds undue delays and costs to the process. In addition, the majority of actions will require further public consultation before becoming operative. For example, actions to be implemented by local government will require community acceptance through the 10-year and Annual Planning process. Other actions, such as the Ohau diversion or new wastewater treatment plants, were required to go through the RMA consenting process.
- All the lakes need action plans. For example, the Green Lake is at risk of going eutrophic. It is important that all lakes have action plans – but some will be easier to develop and implement. For example, Tikitapu is mostly sewerage issues, and Okataina does not have a lot of land use activities around it. But Rotokakahi = WHY is the water quality so different from what is required in the Regional Water and Land Plan?
- Some public reaction was that the Action Plans were taking too long – not enough happening, or not happening quickly enough. EBOP and RDC's response was from regulatory experience is that these things take time. A negative aspect was that public expectation built up and turned into frustration.
- There was both praise and criticism of the two councils. The processes involved a lot of money, time and effort.

Staff from other agencies

- Timeframes – probably don't see this as a negative. Some take longer than necessary of not managed properly, but for the larger ones like Rotorua/Rotoiti, the issues are complex and need to be worked through. Rotorua/Rotoiti is a classic – very long process. When it came to the end we weren't happy – too heavy on engineering solutions and not land use change.

Community members and landowners

- Another issue was that as far as actual proposals, developed over three years, we could have dealt with in 6 months. Delays were caused by the introduction of Rule 11, changing over to OSET etc. That created a lot of consternation – would have added a big cost – unnecessary.
- Takes a long time.

Rotorua Te Arawa Lakes Strategy Group

Positive about longer timeframes

- Long timeframes – these were necessary. Don't think Paul Dell anticipated quite how long they would take, but it was necessary – otherwise people would have felt resentful that they hadn't had their say. There were some compromises reached.

Negative about longer timeframes

- By and large the process was:
 - Unnecessarily long process.
 - Required excessive staff resources.
 - Required too many meetings.
 - Was an expensive process.
 - Set in some cases unrealistic community expectations.
 - Difficult to make changes to once confirmed.
 - The formal Hearing process did not necessarily achieve the best outcome.
- And for all of the above the resultant Action Plan is not legally binding as it is not prepared under the RMA.
- In summary – as has been proven with the Lake Rotorua Plan this is not the way to develop Action Plans for the lakes.
- I suggest that we develop the remainder Action Plans outside the Water and Land Plan process. We can call them something like "Lake Restoration Plans".
- We [should] simply assign to the Regional Special Projects Committee the job of preparing a Draft Lake Restoration Plan for each lake with staff and consultants (if needed), then present that draft to the respective community for input and then finalise.
- I strongly suggest that the process is driven by Operations not Planning. We are talking about primarily operational inventions – not the planning issues. The existing Water & Land Plan contains most of the rules we need for the remaining Action Plans, with the new RPS in time to bring in more targeted and more stringent requirements to support the active intentions in lake restoration process.

- The remaining lakes are very straightforward – no real unknown solutions for any of them.
- The interested lake communities are not happy with our inaction in not completing the remaining Lake Action Plans.
- In summary – I want Council to get on and nail the remaining lakes as soon as possible.

4.2 Document structure and analysis

EBOP and RDC staff

- Poor document structures to date – needs to be shorted and sharper. Needed to reformulate the way the Rotoma and Rotorua/Rotoiti plans looked.

4.3 Staff turnover

EBOP and RDC staff

- Processes have been unhappy for everyone. Issues around staff turnover and getting off on the wrong foot. In relation to Lake Rotoehu, some residents complained about the time taken.

Staff from other agencies

- Lost momentum halfway through – this is a disadvantage of longer timeframes – people coming and going – no succession planning for EBOP staff.

Community members and landowners

- EBOP were using too many Departments to do one job – turning up at meetings and quoting Rules instead of knowing what was going on. Need to put one person in charge.

Rotorua Te Arawa Lakes Strategy Group

- Make sure that if there is a group represented on the Working Party (eg, recreation users), that their representative is consistently the same person – not a substitution – otherwise have to repeat and go over the same ground.

4.4 Composition, purpose, roles and responsibilities of the Working Group

EBOP and RDC staff

Positive about empowered Working Groups

- The groups need to be empowered and their decisions should be given weight by the various agencies who will implement them. Back door deals after all the effort is not helpful.
- Focused consultation with key stakeholders will help achieve buy-in and prevent debate and disagreement downstream in the process. However this consultative process must be focused and time-limited.

Negative about empowered Working Groups

- Action Plan Working Parties (made up of residents from the community, iwi and other interested stakeholders) have been thus far driving the Action Plan development and setting of actions with only a facilitating, rather than directional, role from EBOP, RDC and Te Arawa Lakes Trust. It can be argued that this has not been the most efficient and constructive process as Action Plans have become convoluted, include actions not related to improving water quality in the Lake and have no community consensus over the actions included in the action plan.
- EBOP has not taken ownership for the development and timely progression of Action Plans. The involvement of the lake catchment community is important, and required by Method 41 of the Action Plan, but this method does not require that the Working Party be required to be responsible for the process.
- Action Plan Working Parties driving the Action Plan development process has clearly not been the most efficient and constructive process as Action Plans have become convoluted, and include actions not related to improving water quality in the Lake and there is sometimes no community consensus over the actions included in the action plan. It is therefore necessary to set clear guidelines regarding engagement – who should be on a working party, how they are formed, whether and how they should engage with the wider community/stakeholders.
- Each project plan should be project-managed by an individual from within Environment Bay of Plenty from the outset to completion. Before the Working Party becomes involved, a draft project plan should be completed with clear timeframes for delivery of outcomes. There needs to be accountability for adherence to these timelines. This could involve a project team; however, there should be an individual with accountability for delivering results. Constructive engagement with, and between, different sectors of the lake catchment community should be driven and facilitated by Environment Bay of Plenty. It is not reasonable to expect a working party to fulfill this role. It's apparent from feedback received during consultation on draft Action Plans that the views of certain parties have become entrenched, and there is distrust between different sectors of the lake communities. In turn there is strong resistance to the use of certain actions, particularly those relating to the use of voluntary measures to manage nutrient loss from farm and forestry land. Environment Bay of Plenty needs to take more ownership regarding how engagement with the community proceeds, and focus on ensuring parties can work together constructively. This can be initiated outside of the Action Plan development process. There needs to be a recognition and acceptance that there will be differing views from different parts of the community and various interested parties by the very nature of the groups represented and thatwe sometimes we have to agree to disagree!
- Establish clear accountability for managing the development of Action plans (or their replacement) – ownership should sit with Environment Bay of Plenty.
- Working Party – anyone can come on – they get side-tracked. Might be better to have three Workshops, with clear terms of reference.
- Noted that EBOP nominated the chair for earlier Working Parties. Do we need a chair? Might be better for EBOP to facilitate – not a chair as such.
- Chunk up the work into themes – proper workshops.
- Working Group = whoever turns up on the day.
- Actions have been working party driven with programme partners playing a facilitative role.

- No formal Working Party – not in the format used to date – just open it up to people who want to be engaged. Minimise the ability of vocal people to influence the process.

Iwi representatives

- My participation is due to hapu and iwi connections. Effectiveness depends on how much time I have to go back to the iwi/hapu, and whether or not the vision lines up with where the trusts are going. Unless it's in our strategic plans or at the right management level, probably not effective. The process probably works well for EBOP but not so well at the iwi/hapu level. EBOP needs to work its way into hapu process, and make sure it is talking to the right groups and people. Not an easy task to build the relationships.
- Would be great to have an iwi protocol with EBOP – like we have with RDC around reserves. Two meetings per year for information sharing and relationship building – not decisions or policy making.

Staff from other agencies

- Some members of the Working Parties are probably a little unclear as to the purpose of why they are there (eg, Rotoma – quite a lot of time spent talking about lake levels and boardwalk). The Working Party needs a clear brief of what they are here to try and achieve. They are a sounding board for some of the other issues.
- Needs to be tightly chaired. There is an issue with electing a community member to chair – big issues for them might be what colour the local houses are painted, not anything to do with nutrient losses.
- Let the group identify what it considers to be the most cost-effective options for the community/ratepayers.

Community members and landowners

- With regard to Rotoma, we have finished our plan and it has been accepted. The concept is that the plans are supposed to bring the thoughts of the community together to agree on the key actions that need to take place to ensure the quality of the lake long-term. While this took place, it did however split the community because of the extreme views of a few people. Nonetheless, almost everyone would agree that if what we have agreed to, is carried out, then the quality of the lake will be achieved. What is vital now is that ENBOP drives those actions as quickly as possible, towards achievement.
- Bringing together a group of locals to formulate the required actions is fine but overseeing and driving those actions to completion, is vital.
- You're always going to get a few idiots/bigots who think only their way is the way things should be done but what it will come down to is the local community starting to see things happen and improvements occur.

4.5 Limited community representation and capture by certain community members

EBOP and RDC staff

- Not enough young people participating – not a good cross-section.
- Community expectations are often not met – there is often no community consensus over the actions included in the plan.
- Rotorua/Rotoiti – Good community engagement. Submissions came from a wide variety of people. Quite a few submissions (60-70?). But ‘undone’ at the end by the EBOP decision.
- Okareka very engaged.
- Tarawera very engaged – but had the ‘pin pulled’.
- Engage the local community – run some workshops to bring them up to speed – informed comment.
- In the closing stages of the Rotoma process, the Working Group said it wanted to see the draft Action Plan at least one more time but this was declined by EBOP. Resulted in less buy-in. Buy-in is vitally important to the implementation of the Action Plan – need to keep people involved right throughout the process.
- For those community members that came along – the process made them feel that they were involved in finding the solutions and making decisions. For example, EBOP and RDC agreed to get some research done, to give some indication to the public that they weren’t closed to their ideas.
- However, another impact is that because community members felt involved, it increased their level of expectation around what the Action Plans could deliver. The Action Plans didn’t have the support of statute – relying on EBOP in particular to enshrine the outcomes into policy.

Iwi representatives

- When you are dealing with different areas, you need to be talking to the right people, eg, Tarawera Lakes. Also good to keep the tribal authority (Tuhourangi) informed as well.

Staff from other agencies

- Has been a good process, so long as the right parties are identified and they have the ability to commit to the actions coming out of the Plan.
- Identify the parties who are the main contributors in terms of nutrients – not recreational groups etc, although ‘affected parties’ should also be involved. We can provide an ‘affected party’ side to the debate, but nothing else is asked of us.
- Inform everyone of what is happening, and get acceptance of the science.

Community members and landowners

- Very good with meetings in the local hall.
- Where we initially struck trouble was in a lack of co-operation from the large Maori trusts – had difficulty making contact with them. Once we got them onside, it was a simple process of getting the facts right.
- Hardly any local people went along to argue the figures.
- Listen more sympathetically to what the locals are saying – the consultation process is critical. 75% of the land is in Maori trust farms and the message wasn't getting through. Once this happened the process went smoothly. The locals understand the catchment. Right at the end we realised that a major contributing factor (Waitangi Soda Springs) was being completely ignored – emphasis was in the wrong direction.
- Any process is a communication thing – so long as you keep us informed, everybody will understand.

Rotorua Te Arawa Lakes Strategy Group

- Got really good buy-in from landowners for all action plans (except Rotorua/Rotoiti), however needed to better tell the story to absent landowners – seemed a disconnect.
- Seemed to engage with all affected parties through Land Use Futures Board.
- The process of engagement and participation of and by the community had, initially, been excellent however as time progressed, enthusiasm seemed to wane and attendance/contribution reduced accordingly.
- What went well was the original engagement and what can be done better is expedition of the process.
- Working Parties were the nub of the whole thing. Huge amount of discussion. And a big disparity between what the rural sector thought could be achieved compared to what the lakeside communities thought.
- Some heated moments – very antagonistic between the Lakes Water Quality Society and farmers – needed to be worked through – but this was a good way to do it. Informal setting, so everyone felt they could have their say – put everyone on the same page, compared to hearing from everyone separately. So the process was good – lots of misunderstandings, but these were debated and understood – good way to work through it, even though it was difficult. At least everyone hears what everyone is saying (including EBOP).
- Public consultation – can't really comment on this. Although, when the document came out for consultation, some people were saying 'hey, you didn't ask for my opinion'. Had to reassure them that all opinions were thoroughly covered by the Working Party. Can't think of any improvements to the public consultation aspect.

4.6 Focus on issues not outcomes

EBOP and RDC staff

- Draft Tarawera report didn't have a single water quality issue in it. More focused on recreational and other issues (eg, best launching locations, restricting vehicle access, expanding boat ramps).
- Some actions are not directly linked to improving lake water quality.
- 'Information Days' – why is the lake degrading. One-day workshop.
- Tikitapu solutions are around wastewater reticulation and stormwater = we know what needs to be done, why not just go ahead and do it – not a two-year process.
- When the Action Plans first started (2003), there was nowhere near the level of public awareness and information about the issues compared to now. There has been major increase in level of public awareness, particularly due to the work of Paul Dell.
- Lakes water quality is a long-term issue – will take decades to fix – not all people realised this, therefore frustrated – just wanted the councils to sort it out.

Staff from other agencies

- Start off the process with educating everyone as to what is going on.
- Leave the Working Party to come up with options, rather than presenting options to the Working Party. Don't come in with pre-conceived options.

Rotorua Te Arawa Lakes Strategy Group

- Needed to have better analysis of all options with costing attached. We needed better economic analysis, eg, buying 25 dairy farms out and putting them back on market with covenants attached to title (over next 30 years i.e. one per year).

4.7 Other issues arising

EBOP and RDC staff

- It would be nice to have a lot more science done before you get into the process – but that would be idealistic. There will always be questions that you didn't think of (eg, 'what if we did this?'). There is still a lot of groundwater science to be done.
- Solutions also need to be supported by some changes in the Rules. For instance, Rotoma = no land use rules at present. Someone could harvest forestry and there is nothing to say it then needs to be replanted in forestry – could be converted to dairy.
- To be smart, the two councils could have brought forward their statutory processes, eg, District Plan review, RPS and subservient Regional Plans. The onus was on the councils to bring forward their statutory solutions, to capture the public enthusiasm at the time – but there was a timing gap – didn't go as quickly as hoped. Things should flow more smoothly for the remaining Action Plans.

Staff from other agencies

- One problem has been around identifying a range of options. This is usually iterative, with engineering options plus a whole range of land use options. Anything that is within the mandate of EBOP or RDC engineers then gets implemented, but nothing else happens. It is fairly clear that everybody agrees what is necessary – the problem is in implementing the next step.
- Some of the recent Action Plans have perhaps used a bit of the earlier preconceptions and then rolled with it. Classic example is Tarawera – in reality the input from sewage is not much, but they have decided to spend \$X million on sewerage solutions (ie, a Rotoiti/Rotoehu type solution) – if they had spent \$X million on something else, they could maybe remove 1-2 orders of magnitude more nutrients. Hugely inefficient way of removing nutrients. Latter Action Plans haven't gone through a decent community education process as to the full set of options.
- Have something at the end of the Action Plan process that makes the actions happen – need a better direction re Rule changes, District Plan etc.
- To get other parties to do things (other than RDC and EBOP), the process becomes lost. The only successful land use change has been around Okaro, because there were only about three owners. Land users group – voluntary change – stewardship approach. Same as for Rotoma. But as soon as there are more than a half-dozen land owners, only regulation will work. Land use change is essential – everyone agrees, but then the implementation has no teeth.

Community members and landowners

- One of the initial problems was the assumption that the catchment of Rotoehu would be similar to others. The starting statistics/figures to reduce nutrients were actually uneducated guesses based on other areas – extraneous, difficult situation. They were using the wrong figures – ignorant and incompetent. Need to get the facts right – not overstate them. Held up the process arguing over the figures.
- Get the science right.

Industry representatives (farming and forestry)

- I feel the whole process has been a failure. EBOP come in with their view of what the solution should be and tried to force that onto the community especially the farming community. It has not worked.
- For the process to work there are some simple processes that should be followed. I am not expert in this area but I will give you my view.
- First there has to be a clear vision articulated that encapsulates all the values of the community. Not just the environmental goals of a wealthy few.
- Then the issue needs to be clearly described so that all understand. The farming community still do not accept the accusation that they are the complete problem with the lakes especially since the sewage went into the lake for so many years.
- The science debate has been selective e.g. the chemical aspects and stratification of the lake has been discussed but the change in biology of the lake has not been discussed (i.e. the effect of introduced fish). If we manage the biology differently what effect does that have on algae growth?

- Once there is full disclosure of all the known science then there needs to a full matrix of solutions developed in consultation and collaboration with resource managers. For example what is the cost and practicality of reducing Phosphate by different percentages? If that was achieved with say just holding Nitrogen levels, what is the outcome in water quality over the next 100 years? We do not know as the work has not been done. To me the matrix needs to have a range of criteria to measure each suggested solution. These would include costs of implementation (and to whom), costs to economy, effectiveness, probability of success, risks etc. Once the full matrix has been developed then the community can make informed decisions on the trade offs it will make.
- None of the above has been done effectively. None has been worked through in a collective way.

Rotorua Te Arawa Lakes Strategy Group

- Fantastic process except for Rotorua/Rotoiti action plans. The submission process / hearings / outcome for Rotorua/Rotoiti was too complex to handle.
- Action plan for Tarawera requires sewerage schemes etc, but funding not secure yet.
- So, action plan needs to align more with costings/funding and where the dollars come from.
- The biggest issue is getting the plans agreed to and signed off by the Strategy Group – a case in point being the Rotorua/Rotoiti Plan that was agreed to by RDC and the Lakes Trust but not by EBOP.
- Formal adoption processes – Bit of a mishmash. EBOP hearings involved different people from those on the Working Party – this was a good thing – important to be impartial. Bit if a shambles in terms of EBOP being split down the middle and not adopting the Rotorua/Rotoiti plan.

5.0 ADDITIONAL INFORMATION

In addition to the desktop review and key informant interviews described above, a rapid review was undertaken of agendas and minutes from meetings of the Rotorua Te Arawa Lakes Strategy Group. For the sake of brevity, summary notes have not been taken, but key elements of the information have been incorporated into relevant parts of this report.

6.0 ISSUES AROUND PREVIOUS ACTION PLAN PROCESSES

This report was commissioned by EBOP in response to identified issues with previous Lakes Action Plan processes including:

- The Action Plans took a long time to develop.
- Documents were poorly constructed and analysed.
- Staff turnover during these periods can cause mistrust with the community.
- Working Group processes take on a life of their own and raise non water quality issues or pet issues rather than real issues.
- There was limited community representation and capture by certain community members.
- The focus of plans was on issues not outcomes.

Each of these initially identified issues is addressed in the following pages.

6.1 Timeframes for Action Plan development

The Action Plan process to date has involved developing a parallel series of plans for various lakes, including participation in Working Group meetings, focus group/sub-committee meetings, separate consultation on specific matters and liaison with scientists. Processes to date have ranged from one year (Okareka) up to approximately four years for some Action Plans. The intensiveness of these processes has placed a significant burden on RDC and EBOP staff in particular, over an extended period of time.

In addition, it should be noted that the Lakes Rotorua and Rotoiti Action Plan was left to lie on the table by EBOP, and that the RDC adoption of this Action Plan was accompanied by a review caveat. Advice from EBOP's Chief Executive is that a review should only take place following the adoption of a second generation Regional Policy Statement and of Rotorua's District Plan.

6.2 Document structure and analysis

There is considerable variability between the structure and content of most Action Plans to date, with a substantial amount of scientific explanation accompanying the output/activity and outcome information. Not all of the final documents are online. Few of the documents are what could be called 'user friendly'. Often the substantive aspects of the Action Plan (ie, who is doing what, when, and how much will it cost) is either buried within the document or summarised near the back. It is also unclear from the final documents as to how many stakeholders and community members took the opportunity to make submissions on the Proposed Action Plan, and what changes (if any) were made in response to submissions.

6.3 Staff turnover

There appears to have been a substantial amount of EBOP staff turnover in the past 2-3 years, which has resulted in a loss of 'corporate memory' around the Action Plans development process but also created some degree of distrust when a new batch of staff members were introduced part-way through the development process.

This issue is directly linked to the timeframes and resources for Action Plan development, in that a shorter timeframe and less extensive resourcing for each Action Plan would help to mitigate any negative effects of staff turnover on the process.

6.4 Composition, purpose, roles and responsibilities of the Working Group

6.4.1 Starting point – Method 41

As a starting point for specifying the purpose, roles and responsibilities of the pilot Lake Okareka Action Plan Working Group, EBOP staff had Method 41 as a reference:

'... Develop and implement Stage 3 and 4 of the Action Plan [ie, Action Plan development, implementation and monitoring] in conjunction with an Action Plan Working Group comprising appropriate parties from the individual catchment. The Action Plan Working Group will include, but is not limited to, Rotorua District Council, iwi, community groups, landowners, and relevant resource management agencies and industry representative groups....'

The Method then goes on to list the various aims of the Action Plan development stage (eg, identify factors that affect lake water quality, identify options, identify costs and benefits, etc), which are implicitly the responsibility of the Working Group to oversee.

6.4.2 Approximate composition of Action Plan Working Groups to date

Table 11 summarises the approximate composition of Working Groups to date. This shows that:

- Involvement has been relatively inclusive of different sector interests, including engagement with local community representatives and/or rural landowners (as appropriate to each situation).
- The effectiveness of engagement with iwi/hapu representatives has been variable between Action Plans.
- Elected members and staff of the Strategy Partner agencies have been effectively involved in all cases.
- Farming and forestry industry representatives have been primarily involved in the Lakes Okareka and Rotorua/Rotoiti Action Plans (only).
- Tourism industry representatives and recreation sector representatives have been primarily involved in the Lakes Rotorua/Rotoiti and Tarawera processes.
- DOC and Fish & Game representatives have been consistently supportive of the Working Group processes.

Table 11: Approximate composition of Working Groups to date

Member types	Okareka	Okaro	Rotoehu	Rotorua/ Rotoiti	Rotoma	Tarawera
EBOP elected members	2	2	2	1	2	1
RDC elected members	5			1	1	1
TAMTB	1		2	2		1
Iwi/hapu representatives	1	1	6	8	6	2
Ngati Whakaue Tribal Lands	1			1		1
Community members/ community group reps	15	13	6	3	5	9
Lakes Water Quality Society	1			2		
Rural landowners	2		3	1	4	3
Farming representatives	2		1	4		
Forestry representatives			1	1		2
DOC	2	2	1	1	1	1
Fish & Game	2	1		1	1	1
MAF						1
Tourism sector				1		1
Recreation groups		1		2		1
TOTAL (APPROX)	34	20	22	28	20	25
EBOP support staff*	9	6	7	10	9	5
RDC support staff*	5	5	3	7	3	2

Source: Derived from Action Plan Working Party Minutes.

Note: EBOP and RDC support staff were a core part of the process but were explicitly excluded from formal membership of the Working Party. This appears to have been to ensure clarity of roles.

6.4.3 Initial Working Party 'Terms of Reference' (Lake Okareka)

The 'Terms of Reference' for the pilot Lake Okareka Action Plan Working Party were described in a Draft Action Plan Working Paper at the inception of the project in February 2003. Prefaced by a summary of relevant aspects of Method 41, the Working Party brief was as follows.

Composition

The Working Party was to be composed of representatives from DOC, Fish & Game, Federated Farmers, landowners, the Lake Okareka Ratepayers Association, tangata whenua, RDC and EBOP. An EBOP politician would chair the meetings.

Brief

The Working Party brief is provided in Table 12 below. An initial meeting of the groups would be held to disseminate the information and to discuss the process. Each member would then be required to carry out a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis within his or her own group to put before the combined Working Party. The SWOT analysis would be of methods in the Draft Working Papers report, or methods proposed by the group, to achieve nutrient reductions in the inputs to Lake Okareka. Options should be evaluated from the group's perspective. Particular information is also sought from each group as outline in the table below.

Table 12: Brief for the Lake Okareka Action Plan Working Party members

Working Party member	Brief/Required Output
DOC, F&G	SWOT analysis. Identify potential wetland construction sites and issues. Management of wildlife.
Federated farmers	SWOT analysis. Disseminate information to members. Farming costs. Nutrient/farming management practices. National philosophy on nutrient budgeting.
Landowners Large – Big blocks Small – Lifestyle	SWOT analysis. Aspirations – willingness to convert or retire land. View on conversion of land.
Lake Okareka Ratepayers Association	SWOT analysis. Promotion of the concept and options to the local community. Catchment values.
Tangata whenua	SWOT analysis. Cultural expectations.
RDC and EBOP	Technical/planning: <ul style="list-style-type: none"> – Project management. – Public information. – Promotion. – Finance: – Funding concepts/options.

Source: LOCMAP Draft Working Paper (EBOP, February 2003).

The Working Party would meet for a one-day extensive consultation meeting where the outputs of individual members of the Working Party would be presented and discussed.

Project Plan

Table 13 outlines the Project Plan for the development of the Lake Okareka Action Plan.

Table 13: Lake Okareka Action Plan Development (Project Plan)

Date	Action
February 2003	Complete EBOP/RDC Draft Action Plan.
March 2003	Public meeting.
March 2003	Set up Working Party. Working Party SWOT Analysis.
April/May 2003	Working Party Discussion (all day meeting in Rotorua). Develop implementation strategy.
July 2003	Funding policy.
August 2003	Agreed options.
November 2003	Public consultation. Local community plan. Co-ordination with District Plan and Regional Plan.

Source: LOCMAP Draft Working Paper (EBOP, February 2003).

6.4.4 Modified Working Group 'Terms of Reference' (Lake Rotoehu etc)

The 'Terms of Reference' for some of the more recent Action Plan processes had been refined on the basis of lessons learned from the initial Action Plans. An updated set of Roles and Responsibilities was described in Appendix 2 of the Lake Rotoehu Action Plan as follows.

A: Planning and Governance

Method 35:

Method 35 of the proposed Regional Water and Land Plan requires action plans to be developed for lakes with water quality that exceeds their target TLI (Trophic Level Index). It outlines a four-stage process for action plan development and implementation.

1. Risk assessment and problem evaluation.
2. Action plan prioritisation.
3. Development of action plans for lake catchments.
4. Implementation and monitoring of action plans.

Action Plan Development:

1. Define the existing catchment nutrient budget.
2. Determine the sustainable level of nutrient inputs to the lake, based on the lake's TLI target.
3. Identify nutrient reduction targets.
4. Determine actions to achieve targets.
5. Take a holistic approach to planning: sewerage, landscape, climate change, economics, etc.
6. Reach a general agreement and understanding of the scientific principles involved.
7. Meet the other requirements in Method 35 of the proposed Regional Water and Land Plan.

B: Roles and Responsibilities of the Project Team (Staff)

1. To administer action plan development and working party processes.
2. To ensure minutes and agendas are prepared and circulated.
3. To pre-circulate draft working party meeting agendas where possible.
4. To respond to requests for information.
5. To co-ordinate research/consultants.
6. To ensure regular reporting to the Rotorua Lakes Strategy Group and Councils.
7. To advise the working party on research/actions in a timely manner.
8. To compile the draft action plan for the working party's consideration before presenting it to the Rotorua Lakes Strategy Group and Councils.
9. To report to their respective Councils on urgent actions to be considered for implementation.

C: Roles and Responsibilities of an Action Plan Working Party

Purpose:

To assist with the development of an action plan containing recommended actions (including urgent actions) to achieve the long term water quality objective specified in the proposed Regional Water and Land Plan for that lake(s).

Roles of Working Party Members:

1. To present community/sector group views on lake restoration and specific actions.
2. To evaluate nutrient targets and sources (nutrient budget).
3. To identify possible nutrient reduction options for specific sources.
4. To evaluate these options (similar role for focus groups) with:
 - (a) Holistic perspective.
 - (b) Economic implications.
 - (c) Cost-benefit and effectiveness analysis.
 - (d) Cultural/community values.
5. To identify issues.
6. To identify research/information gaps.
7. To recommend to the Strategic Partners (EBOP, RDC, TAMTB) urgent actions for detailed consideration.
8. To support the Lakes Project Team (staff) in preparing a draft action plan for consideration by the Strategic Partners prior to public consultation.
9. To advise the project team on possible communication options as part of a comprehensive communication plan.
10. To set up focus groups and consider their findings.
11. To identify possible additional participants for the working party or focus groups.
12. To assist in reviewing the nutrient management rules currently in place for that lake catchment.
13. To request additional items on a working party meeting agenda if required.
14. To elect a chairman of the working party.

Responsibilities of Working Party Members:

1. Attendance at working party meetings.
2. Attendance at relevant focus group meetings or identify other attendees where appropriate.
3. To listen and respect each others' views.
4. To recognise that individual working party members may hold differing views.
5. To acknowledge that individual working party members may not be able to endorse a specific action.
6. To recognise the timelines for specific actions.
7. To recognise that specific consultative processes exist (eg, for resource consents, RMA plans).
8. To try and achieve a consensus view on specific actions.
9. To sign off minutes.

The Working Party is Not Responsible For:

1. Budgets and financial expenditure.
2. Statutory processes, such as resource consents and RMA plans.
3. Public consultation, hearing outcome on final plan.
4. Engaging consultants.
5. Directing project team (staff).

6.5 Limited community representation and capture by certain community members

As discussed in the previous sub-section, involvement has been relatively inclusive of different sector interests, including engagement with local community representatives and/or rural landowners (as appropriate to each situation). For the smaller community-scale Action Plans in Okareka, Okaro, Rotoehu, Rotoma and Tarawera, the Working Group membership has been quite fluid. Community members could opt to participate as they desired. However, it is unclear to what extent the wider community was actually engaged in the process beyond attendance at Working Group meetings and/or community workshops. The effectiveness of engagement with iwi/hapu representatives has also been variable between Action Plans.

In the case of the initial Okareka and Okaro Action Plans, chairmanship of the meeting was appointed by EBOP. In latter Action Plans such as Rotoma and Tarawera, chairmanship has been elected by the Working Group itself and has tended to be vested in an actively engaged community member. This has resulted in more influence and ownership of the process being given to the Working Group, which has reportedly resulted in a certain level of drift from the core issue of water quality toward more community-driven issues such as recreational facilities.

Throughout the Action Plans to date there have been some criticisms recorded by vocal participants in Working Groups that the group had no decision-making power and was only able to hear research reports and make occasional recommendations.

6.6 Focus on issues not outcomes

This aspect of the Action Plan processes is closely related to the preceding items. In particular, the community-led aspect of the latter Working Groups and the lengthy time involved in developing the Action Plans has provided scope for the discussions to drift away from the core issue of resolving water quality outcomes.

7.0 FRAMEWORK AND GUIDELINES FOR DEVELOPING FUTURE ACTION PLANS

7.1 Overall approach

The spirit of the Working Group clause in Method 41 is that there is a desire to get wider community and stakeholder input into the Action Plan process. Hence, there is a desire to supplement the 'representational democracy' role of EBOP with more participatory processes. While this may seem like an implicitly positive move, it has resulted in a number of issues with the Action Plan process, most notably around a lack of efficiency and effectiveness in developing outputs.

As discussed in section 2.2 above, a key element of contemporary thinking about community engagement is that the level and types of participation in decision-making depends crucially on what you are trying to achieve. In other words, a high level of community-led participation is not necessarily merited in all cases, but should be taken into consideration. Sometimes a more appropriate goal of public participation is primarily to inform and educate. Reasons why a community-led 'Working Group' may not be appropriate include:

- Apart from land-use change and farm management practices, other local community activities have only a small impact on the issue of nutrient levels in the lakes. The most significant responses to improve long-term water quality are in the domain of public agencies such as EBOP and RDC. The water quality issues for remaining lakes can be largely addressed through a specialist toolkit of measures such as construction of wetlands and in-lake phosphorus treatments.
- Local community members already have a generally high level of vested interest in their local environment. Participation in a Working Group may serve to increase their level of knowledge about lake water quality issues, but such knowledge could also be imparted through community workshops, brochures and newsletters. Separately from the Action Plans process, EBOP is working directly with farmers to achieve nutrient reductions.
- The remaining lake catchments have relatively small populations which can be effectively engaged through targeted community meetings and newsletters.
- The Working Group format has potential to drift from the core issue of addressing water quality issues into other matters such as recreational facilities, which are more appropriately addressed in other forums.

A key aspect of the recommendations that follow is therefore to re-interpret the 'Working Group' Terms of Reference and for EBOP to take a more directive approach to the Action Plan process. Key elements of the approach are summarised as follows:

- (a) Carefully consider whether or not to have an Action Working Group Plan for each lake (ie, not all lakes may need Action Plans, or in some cases the Action Plan may simply be more straightforward to develop and implement).
- (b) Individual Action Plans should be developed over a maximum one-year timeframe.
- (c) A Draft Action Plan should be developed by EBOP prior to commencement of Working Group meetings.
- (d) The primary roles of the Working Group should be to review the Draft Action Plan, discuss alternative actions and community priorities, and encourage public feedback on a revised Draft Action Plan.
- (e) Working Group meetings should be facilitated by EBOP staff (or by a contracted consultant).

- (f) Working Group meetings should involve a series of no more than 2-3 well-defined workshop meetings with clear agendas and an iterative approach to decision-making.
- (g) Public feedback processes for Proposed Action Plans should be streamlined.
- (h) Draft and final Action Plans should be approved first by the Rotorua Te Arawa Lakes Strategy Group and then recommended for approval by individual partner agencies.
- (i) The monitoring, evaluation and review aspects of each Action Plan should be clearly defined, including a streamlined 9-10 year cycle for technical review and public submissions.

Each of these recommendations is expanded on below. This is followed by a possible timeline for the development of remaining Action Plans.

Note that the recommendations above seek to fulfil the spirit and intent of Method 41 of the BOP Regional Water and Land Plan. However, this is balanced against the need for a pragmatic approach which achieves a robust Action Plan development process without unnecessarily long timeframes or use of public resources.

7.2 Consider whether or not to have an Action Plan Working Group for all lakes

For each of the remaining lakes, EBOP needs to consider whether or not an Action Plan Working Group approach is warranted in terms of the time and effort required. For some lakes, where the solutions are simple and there are only a small number of actions, an Action Plan may not be required or may be very straightforward to develop and implement. In this case a Working Group approach may not add sufficient value to be worthwhile.

Strictly speaking, Method 41 does not require an Action Plan to be developed for all Rotorua lakes. As per Stage 2 (Project Prioritisation), the 'un-degraded' lakes only need to have an Action Plan developed if the results from a water quality Risk Assessment reveal that an Action Plan is necessary. Prioritisation is at the discretion of the Strategy Partners. EBOP should therefore consider making recommendations to the Strategy Partners around which lakes would merit Action Plans, and also which lakes would either not merit Action Plans or should be developed through a more simple process than that envisaged in Method 41 (including the rationale for this).

Table 14: Lakes TLI status and targets for remaining lakes

Lake	Lake Action Plan development timeframe	Current TLI (three-yearly average to 2009)	Target TLI (Objective 11)	Approximate population
Tarawera	3 May 2006 ongoing	2.9	2.6	267
Tikitapu (Blue Lake)	Pending	3.0	2.7	n/a
Okataina	To be determined	2.8	2.6	n/a
Rerewhakaaitu	To be determined	3.7	3.6	231
Rotomahana	To be determined	4.0	3.9	135
Rotokakahi (Green Lake)	To be determined	4.0	3.1	n/a

Sources: Refer to earlier tables in this report.

Although Lake Rerewhakaaitu is not considered to be degraded at this time, there may be merit in following through with a formal Action Plan for this lake. Landowner action is already under way in the area. According to a recent article in the Rotorua Daily Post (16 June 2010), EBOP invited farmers in the Lake Rerewhakaaitu area to prepare the lake's catchment plan, following a series of successful Sustainable Farming Fund projects to address nutrient management. Although the intention may not have been to express this in terms of an Action Plan as such, it should be a relatively straightforward task to engage with local landowners to develop a concise 'Water Quality Improvement Plan'.

The development of Action Plans for some lakes could be more straightforward than others. For example issues around Lake Tikitapu could be addressed primarily through sewerage improvements. Similarly, Okataina may be relatively straightforward as it does not have a lot of land use activities around it.

Feedback from EBOP staff suggests there may be merit in proceeding with an Action Plan for Lake Rotokakahi, given that it is in danger of slipping into a eutrophic state and that little is known about what is causing this. Another feature to be mindful about with Rotokakahi is that it is in private Māori ownership.

7.3 One-year timeframe

For those lakes that the Strategy Partners decide should have Action Plan Working Groups, key elements of context are that (a) they are generally not for 'degraded' lakes – that is, they are for lakes that are either healthy or considered stable; (b) they relate to small local population catchments; and (c) much of the base information is readily available to compile a Draft Action Plan. With regard to the latter point:

- A Lakes Water Quality Risk Assessment and Action Plan prioritisation was compiled in 2005, covering all lakes.
- An Intervention Framework has been prepared by EBOP.
- A list of current and possible actions for all remaining lakes has been compiled by EBOP, which provides a good foundation for developing a Draft Action Plan.
- EBOP produces a standardised set of annual Report Cards for each lake, providing an update against proposed actions as well as current TLI and indicative water quality trend.

Given the various factors above, the amount of time and resources that goes into developing Action Plans for remaining lakes should not be exorbitant. A well-structured process that complies with the spirit and wording of Method 41 should take no more than one year of development, excluding any additional time that may be required for public consultation and formal agency adoption. This could be achieved through 2-3 clearly directed Working Group workshops. There should not be any option of convening sub-committees or extra Working Group meetings other than what is prescribed by EBOP.

The Action Plan process for Lake Tarawera should be even less than one year, given that almost all of the background work has been completed. With the agreement of existing Lake Tarawera Working Group members, EBOP should seek to finalise this Action Plan through a single community workshop followed by adoption by the various sponsoring agency and the Joint Strategy Committee.

According to feedback from EBOP, there is only sufficient staff time and resources available to undertake two Action Plans at any one time. This is a very real constraint that should be reflected in the future work programme. No additional Action Plan should be scheduled to commence until a previous Action Plan process is coming to a close.

Note that this report assumes that EBOP management would establish clear lines of staff responsibility for leading and managing the Action Plan process in each case. This has been identified as a cause of concern in some previous processes, given that a range of EBOP departments tend to be involved.

7.4 Development of an initial Draft Action Plan by EBOP

It needs to be clear from the outset that EBOP is 'holding the pen' in the Action Plan development process. Ownership and accountability for managing the development of Action Plans rests clearly with EBOP.

Prior to initiating a Working Group for each lake catchment, EBOP should be very clear about its initial expectations for what activities can be realistically undertaken to improve water quality. A complete Draft Action Plan should be developed by EBOP prior to commencement of Working Group meetings, and should be distributed at the initial meeting as part of the introductory material. There may be merit in developing a template approach, to assist timely production of the documents and to help focus Working Group discussions.

The initial Draft Action Plan, revised Draft Action Plan and final Draft Action Plan should be relatively concise documents that cover off core elements of Method 41 and good-practice strategic planning. The Action Plan document may be supplemented with additional scientific Working Papers, brochures and summary newsletter information, but only the core information should be in the Action Plan itself. Feedback from EBOP staff is that the detailed Working Papers are a useful reference that should be retained as a separate resource.

An indicative Action Plan report structure is as follows (note: this builds on the more refined structure that has been previously applied to the final versions of the Rotorua/Rotoiti and Rotoma Action Plans):

- Action Plan Summary (including summary of costs and benefits, priorities and timeframes).
- Background/Introduction (concise overview of the issues).
- Nutrient Sources.
- Water Quality (TLI) and Nutrient Reduction Targets.
- Options, Costs and Benefits.
- Priorities.
- Implementation Plan (specific actions, timeframes, responsibilities and funding sources).
- Monitoring and Review.

EBOP should seek to keep all Action Plan-related information pitched at a community or layperson level, including using visual aids such as maps, diagrams and posters.

Note that, since the development of earlier Action Plans, a 'toolkit' of potential actions and their characteristics, costs and benefits has been identified. This intervention toolkit can meet many of the requirements of Method 41 in terms of identifying the costs and benefits of different nutrient management methods and ensuring that the macro-economic and micro-economic effects of lake water quality maintenance or improvement measures are taken into account.

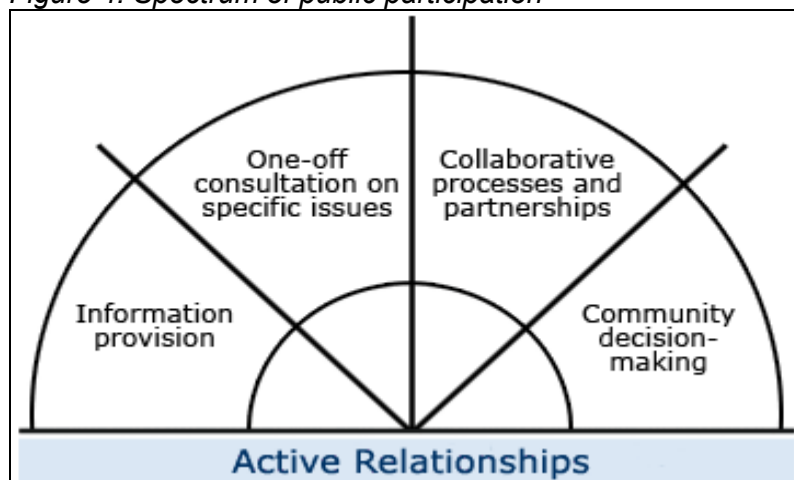
All interim and final documents should be posted online on EBOP's website. Each Final Action Plan should include a brief summary of any changes made in response to submissions, and perhaps a brief summary of the number of submissions received and the key themes arising.

7.5 Alternative terms of reference for the Working Group

Up until this point, the terms of reference for the Action Plan Working Groups has been relatively broad (refer section 5.4 of this report). In the case of the more recent Action Plans in particular, this has resulted in a drift away from focusing on water quality issues and toward more of a focus on recreational and other issues. EBOP needs to be clear from the outset that the primary roles of the Working Group should be to review the Draft Action Plan, discuss alternative actions and community priorities, and encourage public feedback on a revised Draft Action Plan. In essence,

what is being proposed is a move leftward on the spectrum of public participation (below) to one that is less about 'community decision-making' and more about consultation on specific issues.

Figure 4: Spectrum of public participation



Source: Good Practice Participate website, accessed May 2010. Website reference: www.goodpracticeparticipate.govt.nz/levels-of-participation/index.html.

To follow is an example of what the revised Terms of Reference might look like. This should be modified by EBOP as appropriate.

Table 15: Proposed Terms of Reference for Working Groups

<p>Purpose:</p> <p>To assist with the development of an Action Plan to achieve long-term water quality improvements.</p> <p>Membership:</p> <ul style="list-style-type: none"> Membership is open to all invited stakeholders and any other community members who wish to have input. <p>Roles of Working Group Members:</p> <ul style="list-style-type: none"> To review an initial Draft Action Plan prepared by EBOP. To represent community/sector group views on lake restoration and specific actions. To identify possible new options for nutrient reduction. To assist EBOP to consider options, cost and benefits, and to agree on priorities for Action Plan implementation. To advise EBOP on possible communication options, and to promote the Action Plan consultation process through local networks. To assist in reviewing nutrient management rules for the lake catchment. <p>Responsibilities of Working Group Members:</p> <ul style="list-style-type: none"> To listen and respect each others' views. To recognise that individual working group members may hold differing views. To acknowledge that individual working group members may not be able to endorse a specific action. To recognise the timelines for specific actions. To try and achieve a consensus view on specific actions.

The Working Group is Not Responsible For:

- Electing a chairperson (all Working Group workshops will be facilitated by an EBOP staff member or independent consultant).
- Budgets and financial expenditure.
- Statutory processes, such as resource consents and RMA plans.
- Public consultation or hearing outcomes on the final plan.
- Engaging consultants.
- Directing project team (staff).

Note that Nick Zaman's 2009 'Informal review of the Development of Lake Action Plans' suggested the option of taking this one further step – to replace the current Working Group model and engage directly in wider consultation with the community and stakeholders. While the recommendations in this consultancy report do not stray quite so far from the prescriptive wording of Method 41, the general intent is the same. In other words, the purpose of engaging in a 'Working Group' process should be to ensure that local community members and relevant stakeholders are adequately and appropriately engaged in the planning process. The approach should be around consultation on specific proposals and not a 'blank-sheet' approach which gives undue control of the process to the Working Group.

7.6 Working Group meeting facilitation

From the outset, it should be stated that all Working Group meetings will be facilitated either by an appropriate EBOP staff member or by a specialist facilitator (ie, a consultant contracted to EBOP). The Working Group should not have the option of electing an internal leader, as this would have the potential to alter the focus and timeframes for the process.

In some of the earlier Action Plans (Okareka and Okaro), chairmanship of the Working Groups was firmly in the hands of EBOP and RDC Elected Members. This had the benefit of endowing a degree of status to the meetings, and ensured that there was a high level of buy-in to the resulting Proposed Action Plan from at least one Elected Member who could then champion the document through subsequent formal approval processes. Our recommendation is that there should continue to be representation at each Action Plan Working Group meeting by 1-2 nominated EBOP Elected Members, to ensure a strong link to the final decision-makers. Ideally, there should also be representation at each Working Group meeting by an RDC Elected Member and a mandated representative of Te Arawa Lakes Trust, to ensure linkages with each of the Strategy Partners and their approval processes.

7.7 Working Group workshops and agendas

There should be no more than 2-3 meetings scheduled over a six-month timeframe, and the meeting agenda should be clearly specified. An indicative format is as follows. Note that this is a modification of the meeting format that was emerging from the latter part of the previous Action Plan processes (eg, Lakes Rotoma and Tarawera). For the purpose of inclusiveness, EBOP may wish to hold at least the first meeting in a local venue where available (eg, Rerewhakaaitu Settlers Hall). Alternatively, a central meeting venue in Rotorua should be sufficient, with adequate notice to enable local residents to attend. All Working Group meetings should be open for anybody to attend. Note that the level of public interest in the Tikitapu (Blue Lake) Action Plan may be higher than for other lakes, given its status as a popular recreational lake for Rotorua residents.

If there are large numbers of people wishing to participate in a particular Working Group meeting, then certain aspects should be run in small-group format (ie, small group discussions followed by report-back to the full group). This would make best use of people's time and enable maximum participation.

In terms of the second and third workshops, the facilitator should bear in the mind that the aim is to take an iterative approach to decision-making. Agency staff should be prepared to challenge the initial assumptions and science behind the Draft Action Plan. All views need to be listened to, and EBOP should be seen to be receptive to new knowledge and prepared to act upon it (eg, through commissioning new research).

Table 16: Proposed Working Group workshops format

Meeting	Date	Agenda
1	Commencement	<ul style="list-style-type: none"> – Introductions. – Working Group Terms of Reference. – Distribution of initial Draft Action Plan and overview presentation. – General discussion. – Schedule of subsequent meeting(s).
2	1-2 months later	<ul style="list-style-type: none"> – Reiterate Terms of Reference. – EBOP presentation – Water quality (TLI) and nutrient reduction targets, followed by Q&A. – Discussion around options, costs and benefits. – Workshop exercise – Initial prioritisation of actions. – Review of Rule 11 in relation to this lake catchment (as per Method 42) – possible restrictions on discharge of nutrients from land-use activities. – General discussion, including any novel ideas for achieving water quality improvements.
3	1-2 months later	<ul style="list-style-type: none"> – Reiterate Terms of Reference. – Feedback on investigations into any new ideas from the last meeting. – Review of revised Draft Action Plan (incorporating discussion points from the previous meeting). – Ideas for promoting the public consultation stage. – General discussion and any closing issues that the Working Group may wish to address.

7.8 Public feedback processes

Method 41 of the Regional Water and Land plan requires that information and research findings should be disseminated to the community, but does not specify at what stage in the process this should occur or even that proactive public consultation is required. In practice an extensive consultation process has developed which has included, in some cases, a public hearing at which submissions are presented to a Hearing Panel from the Rotorua Lakes Strategy Group. Comments from some EBOP staff suggest that this approach has not adding significant value to the process or outcomes, although other feedback suggested that submissions on the Draft Lake Rotorua/Rotoiti Action Plan were a successful element of the process.

Given that Lake Action Plans are non-statutory documents, and that some actions may require further public consultation before becoming operative (ie, through EBOP and RDC annual plans and ten-year plans and/or through RMA processes for specific interventions), there appears to be a case for streamlining the public consultation stage where possible. For example, there may be merit in the public consultation for Action Plans occurring in conjunction with broader EBOP Annual Plan consultation processes. This could help raise the profile of public consultation on Proposed Action Plans, by placing them in the context of a broader consultation process with accompanying public promotion and advertising.

In terms of applying elements of the LGA Special Consultative Procedure (SCP), Council has discretion about which elements it may wish to apply or not apply to the Action Plans process, so long as it has a clear rationale. The SCP is described in s. 83 of the LGA 2002. In short, it involves compiling a Statement of Proposal and Summary Statement of Proposal, adopting these at a formal Council meeting, making them publicly available through prescribed methods, providing

written acknowledgment of all submissions, and providing formal and publicly open opportunities for submitters to be heard. The SCP is required to be used in relation to Long-Term Council Community Plans, Annual Plans, adoption, review or amendment of bylaws, change of mode of delivery of a significant activity, and adoption of a Significance Policy. In all other cases, Council has discretion around whether and how it consults with the public. More relevant in the case of Lakes Action Plans are sections 76-81 of the LGA which provide guidelines for decision-making generally. A key section is s. 79, which states that Council has the discretion to make judgments about how best to achieve compliance with the decision-making sections of the Act, taking particular note of the level of significance of the proposed decision or initiative.

Taking into account the matter of discretion as noted above, there is merit in allowing written submissions only, to avoid the cost involved in having a formal Hearing with verbal submissions. EBOP, potentially in partnership with the Joint Strategy Group, would have responsibility for amending the Proposed Action Plan to account for feedback through submissions. The formal adoption process for each agency would then follow.

Given that a primary purpose of the consultation process is to engage with the wider community by informing and educating, EBOP may wish to develop additional consultation materials for various sub-sectors. In particular, EBOP may wish to consider creating posters or other information that can be shared with local school children. Existing resources may already be available.

EBOP should also make good use of its website to facilitate feedback on working papers and Draft Action Plans. Online submissions should be promoted alongside community meetings and hardcopy written feedback options.

Another important factor to be taken into account is the processes for engaging with local hapu and iwi. Whether or not this is undertaken as part of the Working Group process, engagement with hapu and iwi needs to start early and with the right people. There also needs to be sufficient time for these representatives to report and consult through their existing systems, and for a relationship to be built up with agency staff members in relation to the proposed Action Plan.

7.9 Adoption process

To date there have been a range of approaches in terms of the specific steps to be taken in formally adopting Action Plans. The opinion of this Consultant is that a pragmatic approach should be taken to the public consultation and formal submissions processes for Lake Action Plans. Draft and final Action Plans should be approved first by the Rotorua Te Arawa Lakes Strategy Group and then by individual partner agencies. This should not be an onerous or resource-intensive aspect of the process, so long as the Action Plan has been developed in a robust manner. Lake Action Plans are non-statutory documents that must be responsive to changing circumstances and emerging issues. If one or more parties fails to formally adopt a specific Action Plan, this should not prevent or delay the implementation of operational works programmes aimed at improving lakes water quality.

7.10 Monitoring, evaluation and review

The monitoring, evaluation and review aspects of each Action Plan should be clearly defined. EBOP now produces a standardised set of annual Report Cards for each lake, providing an update against proposed actions as well as a current TLI figure and indicative water quality trend. This Report Card format should be adequate for ongoing monitoring and evaluation.

One element that has not been well addressed in Action Plans to date is the process for reviewing and refreshing each Plan. Given the amount of time and effort that goes into initially identifying and prioritising the actions for each lake, and the generally technical nature of the water quality interventions, we recommend that there be a streamlined 9-10 year cycle for technical review and public submissions of each Action Plan. In other words, we do not recommend re-convening a

Working Group process each time the Action Plan is scheduled to be reviewed. The process should be kept relatively straightforward in terms of having agency staff evaluate the efficacy of existing actions, consider alternatives and present all options, costs and benefits in a concise Proposal that may be subject to a public submissions process. Such a process may be more streamlined than a full Working Group approach, but would still need to be budgeted into a formal Action Plan Review cycle.

Further streamlining could occur if the full set of Action Plans were to be bundled together (say, in the mid-2010s) into single 'Rotorua Lakes Water Quality Improvement Plan'. Note that the name-change to a 'Water Quality Improvement Plan' was suggested in 2009 by Nick Zaman in his Informal Review, to help avoid confusion by parties as to the exact intent of the plan. Our recommendation here is to continue using the term 'Action Plans' for the development of the remaining Plans (particularly Tarawera and Tikitapu), for consistency with Method 41. However, Method 41 relates primarily to the Action Plan development phase and has little to say about implementation and monitoring. The Method is silent on the issue of a review cycle for the Action Plans. Our recommendation is to bundle up all the plans into a single concise document which would be reviewed every 9-10 years through a technical assessment and public submissions process (potentially in parallel with EBOP's Annual Plan or Long-Term Plan consultation process).

7.11 Possible timeline for completion of remaining Action Plans

Subject to EBOP decisions around which remaining lakes to develop Action Plans for and the nature of the Working Group and formal adoption processes, an indicative timeline is shown as follows.

Table 17: Indicative timeline for remaining Action Plans

Lake	Draft Action Plan/ Working Papers developed by EBOP	Initial Working Group meeting	Final Working Group meeting	Formal adoption
Tarawera	2006	May 2006	Before December 2010	Mid-2011
Tikitapu (Blue Lake)	Before initial Working Group meeting	Mid-2010	Mar/Apr 2011	Mid-2011
Rerewhakaaitu	Before initial Working Group meeting	Nov/Dec 2010	Mid-2011	Mid-2012
Okataina	Before initial Working Group meeting	Mid-2011	Mar/Apr 2012	Mid-2012
Rotomahana	Before initial Working Group meeting	Nov/Dec 2011	Mid-2012	Mid-2013
Rotokakahi (Green Lake)	Before initial Working Group meeting	Mid-2012	Mar/Apr 2013	Mid-2013

In addition to the timeline above, there would be merit in reviewing the Lake Rotorua and Rotoiti Action Plan which has not been formally adopted by EBOP. This could potentially be a major undertaking, and should be resourced accordingly.

We also note from EBOP staff recommendations to the Rotorua Te Arawa Lakes Strategy Group (dated 16 April 2010) that there is a proposal to update and refresh the over-riding Strategy for the Lakes of the Rotorua District. Again, this could potentially be a major undertaking and should have appropriate resourcing and timeframes.

In terms of the streamlined Action Plan Review cycle recommended in this report, EBOP may wish to aim for aligning this with its Long-Term Plan consultation process. This could be achieved by bundling together the Lakes Okaro, Rotoehu, Rotorua/Rotoiti, Okareka and Rotoma Action Plans into a single 'Rotorua Lakes Water Quality Improvement Plan' during early-mid 2011, undertaking an in-house technical review during 2011/12, and consulting on a refreshed Proposed Rotorua Lakes Water Quality Improvement Plan during 2012. Subsequent Action Plans (eg, for Lake Tarawera) could be bundled into the next iteration of this combined 'Rotorua Lakes Water Quality Improvement Plan' during the next review cycle in (say) 2018.

7.12 Issues relating to Method 42

An additional issue to come through is that much of the inter-stakeholder tension created through Lake Action Plan development processes can be attributed to Method 42 of the BOP Regional Water and Land Plan. This specifies that each Action Plan Working Group (comprising local community members, key stakeholders and agency representatives) must assist in reviewing the necessity and application of a nutrient cap for each lake catchment (ie, similar to Rule 11 of EBOP's Regional Water and Land Plan in relation to lakes Rotorua, Rotoiti, Okareka, Rotoehu and Okaro). If agreement is not reached on such a cap, then any land use or management change will remain solely on a voluntary stewardship approach for that lake catchment.

Regarding the above issue, if a general decision could be reached by the Rotorua Te Arawa Lakes Strategy Group and EBOP on the intent to introduce a nutrient cap for the catchments of all lakes that are exceeding their target Trophic Level Index (TLI), then the Lake Action Plan process could be simplified and made less contentious. This would create a regulatory foundation for all lake catchments, creating a firmer basis on which to develop individual Lake Action Plans.

APPENDIX ONE: METHODS 41 AND 42 OF THE BOP REGIONAL WATER AND LAND PLAN

Source: <http://www.envbop.govt.nz/Knowledge-Centre/Regional-Water-and-Land--Plan.aspx>

Working with Other Resource Management Agencies and the Community

Method 41

Develop and implement Action Plans to maintain or improve lake water quality to meet the TLI set in Objective 11. Action Plans will be developed according to the following process.

Action Plan Stages

1 Stage 1 – Risk Assessment and Problem Evaluation

- (a) Identify lakes that exceed the TLI set in Objective 11, and initiate Stage 3. As at August 2003, the lakes that exceed the TLI are Lakes Okareka, Rotoehu, Okaro, Rotorua and Rotoiti. The timeline to initiate Stage 3 is:
 - (i) Lake Okareka – early 2003.
 - (ii) Lake Rotoehu, Lake Okaro – mid 2003
 - (iii) Lakes Rotorua & Rotoiti – mid 2003
- (b) For all other Rotorua Lakes not specified in (a):
 - (i) Evaluate the risk of the lake exceeding the TLI set in Objective 11, and initiate Stage 2. The timeline to initiate the risk assessment is: Lakes Rerewhakaaitu, Tarawera, Rotoma, Okataina, Tikitapu, Rotokakahi, Rotomahana – 2005. The risk of the lake exceeding the TLI will be assessed using all lake water quality monitoring data, including, but not limited to, dissolved oxygen (Hypolimnetic Volumetric Oxygen Depletion Rate), water temperature, nitrogen and phosphorus levels, Chlorophyll a, algal species, Secchi disc depth, TLI, and Percent Annual Change. The evaluation will take into account the age of groundwater, spring water and inflowing stream water in the catchment, and the lag time between land use activities and effects on water quality.
 - (ii) Where state of the environment monitoring identifies that a lake exceeds its TLI specified in Objective 11, where the 3-year moving average TLI for the lake exceeds its designated TLI specified in Objective 11 by 0.2 for 2 consecutive years, initiate Stage 3.

2 Stage 2 – Project Prioritisation

- (a) Evaluate the results from Stage 1(b) (i) to determine if Stage 3 and 4 of the Action Plans are necessary to maintain or improve lake water quality.
- (b) Prioritise the development of Stage 3 and 4 of the Action Plans for lakes where such action is necessary. Prioritisation will be determined in conjunction with the co-management partners of the Strategy for the Lakes of the Rotorua District.

3 Stage 3 – Development of Action Plan for Lake Catchment

- (a) Where lake water quality exceeds the TLI:
 - (i) Identify and quantify the lake water quality problem and any necessary research.
 - (ii) Identify and quantify the reduction of nitrogen and phosphorus required in the catchment to achieve the TLI in Objective 11.

- (iii) Estimate the contributing sources of nitrogen and phosphorus in the catchment, and the effects of existing land uses and activities in the catchment on the lake's nutrient load.
- (iv) Estimate the lag between actual land use change and lake water quality effects.
- (v) Establish a timeline for developing an Action Plan for the lake catchment.
- (b) Disseminate information and research findings to the community.
- (c) Develop and implement Stage 3 and 4 of the Action Plan in conjunction with an Action Plan Working Group comprising appropriate parties from the individual catchment. The Action Plan Working Group will include, but is not limited to, Rotorua District Council, iwi, community groups, landowners, and relevant resource management agencies and industry representative groups. The main aims of Stage 3 of the Action Plan are:
 - (i) Identify factors that affect lake water quality and any necessary research.
 - (ii) Include equitable and workable provisions to address effects on existing land uses where it is necessary to restrict land use to maintain or improve water quality. Such provisions include, but are not limited to, criteria for possible financial assistance and land acquisition.
 - (iii) Identify efficient, cost-effective and equitable measures and options to reduce inputs of nitrogen and phosphorus from the lake catchment to maintain or improve lake water quality.
 - (iv) Determine if the TLI in Objective 11 can be realistically achieved, and a practicable timeline for achieving the target TLI.
- (d) Identify the costs and benefits of different nutrient management and reduction methods. Such methods include, but are not limited to:
 - (i) Education on nutrient management;
 - (ii) Riparian retirement;
 - (iii) Constructed wetlands;
 - (iv) Sewage reticulation;
 - (v) Review of existing discharge consents in the catchment;
 - (vi) Land use changes;
 - (vii) Land purchase or lease;
 - (viii) Engineering works;
 - (ix) Nutrient trading systems.
- (e) Take into account the macro-economic and micro-economic effects of lake water quality maintenance or improvement measures, including the value of land use and lake water quality to the catchment, district, region and wider community.
- (f) Apply existing funding policies and other funding options for lake water quality maintenance or improvement works, including, but not limited to:
 - (i) Differential rating as a means of paying for works within the catchment.
 - (ii) Central government funding.
 - (iii) User charges.
 - (iv) Environmental Programmes.
- (g) Determine if regulatory measures are necessary to control the discharge of nitrogen or phosphorus, or both, from land use activities in the lake catchment (Refer to Method 42).
- (h) Document a timetable for implementing nutrient management and reduction options.

4 Stage 4 – Implementation and Monitoring of Action Plans

- (a) Implement the lake water quality improvement measures identified and agreed to in Stage 3.
- (b) Evaluate and report progress towards achieving the TLI in Objective 11 to all parties, and the community.

Method 42

In conjunction with the Action Plan Working Group (refer to Method 41), review the necessity and application of the Rules in section 9.4 of this regional plan to individual lake catchments.

1. The review will:
 - (a) Consider matters from the Action Plans developed in accordance with Method 41.
 - (b) Consider how to achieve the long-term sustainable management of nitrogen and phosphorus use and discharges in the individual lake catchment.
 - (c) Recognise that it may be efficient, effective, and appropriate to develop and implement specific rule(s) for each of the lake catchments.
 - (d) Recognise that the Action Plan Working Group may recommend to Environment Bay of Plenty any changes to the rules in section 9.4, but Environment Bay of Plenty retains control over the plan change process. Members of the Action Plan Working Group and individuals retain the right of submission and appeal.
 - (e) Include any changes to the rules in section 9.4 through a plan change process in accordance with the requirements of Schedule 1 to the Act.

2. The review will be discussed during the development of the Action Plans, and plan change(s) initiated for:
 - (a) Lake Okareka – January 2005.
 - (b) Lake Rotoehu – January 2006.
 - (c) Lake Okaro – January 2006.
 - (d) Lake Rotorua and Rotoiti – January 2006.

APPENDIX TWO: OVERVIEW OF LAKE ACTION PLAN DEVELOPMENT PROCESSES

Lake Okareka

Background information and research

Following public consultation during 2000-2001, the long-term water quality goal for Lake Okareka was set at TLI 3.0 (compared to current TLI of 3.3).

From the outset, the Lake Okareka Action Plan was referred to in full as the Lake Okareka Catchment Management Action Plan (LOCMAP).

Background information and research findings were presented through a range of community meetings and newsletters during the development of the Lake Action Plan, with subsequent information continuing to be distributed following the adoption of the Plan in mid 2004.

A wide variety of information was distributed to inform the project, including:

- Targets for nitrogen and phosphorus reduction.
- Overview of how the N and P reduction targets were calculated (ie, using scientific methods).
- Information about what would happen if nutrient reduction actions were not implemented.
- Overview of nutrient sources.
- Timeline and contact details.
- Specific presentations by key informants (eg, sewerage scheme progress reports and information about constructed wetlands).

Action Plan Working Party

Membership of the LOCMAP Working Party and other meeting attendees is recorded in various documents as follows (in alphabetical order). Note that inconsistencies between the lists of people attending various meetings over time suggest that participation in Working Party meetings was relatively fluid in relation to community and local stakeholder input, as well as RDC, EBOP and Te Arawa representation during the duration of the project. Names below that are associated with an asterisk (*) are identified in the August 2003 community update newsletter as being a member of the core Working Party. The list below was further verified from Appendix 5 of the Proposed Action Plan (Working Party Members). During any single meeting there were approximately 20-30 people present including Working Party members, other attendees and support staff.

- Phil Alley (Department of Conservation).*
- Mike Bannister (LORRA).
- Cr Peter Barry (RDC).
- Brentleigh Bond (Lakes Water Quality Society).
- Cr Bill Cleghorn (EBOP).
- James Blakely (LORRA).*
- Sam Denford.
- Andy Garrick (Fish & Game).*
- Don Gollum.
- John Herbert (rural landowner).*
- Campbell Johnstone (Lake Okareka Residents and Ratepayers Association – LORRA).
- Cr Russell Judd (RDC).

- Cr Cliff Lee (RDC).
- Roger Lorigan (community member).*
- Cheryl Lyons (community member).
- Gifford McFadden (Federated Farmers).*
- Lachlan McKenzie (Federated Farmers).
- David Marshall (Department of Conservation).
- Ron Marsden.*
- Lara Meyer (community member).*
- Cr Rosemary Michie (EBOP) (Co-Chair).*
- Cr Neil Oppatt (RDC) (Co-Chair).*
- Geoffrey Palmer.
- Rob Pitkethley (Fish & Game).
- Fenella Playne (rural landowner).*
- Anaru Rangihueua (TAMTB).*
- John Roper.
- Malcolm Short (Pukeroa Oruawhata Trust/FOMA).*
- Jack Smith (community member).*
- Rod Stace (LORRA).*
- Rick Vallance (Ngati Whakaue Tribal Lands).
- Marcel van Leeuwen (rural landowner).*
- Cr Janet Wepa (RDC).
- Kim Young.

Support staff for the Working Party included the following:

- Paul Dell (EBOP Lakes Project Coordinator).*
- Ruth Feist (EBOP Resource Planner).
- Jonathon Findon (EBOP Land Management Officer).
- Bruce Fraser (EBOP Group Manager People and Partnerships).
- Penny MacCormick (EBOP Nutrient Assessment Officer).
- John McIntosh (EBOP Manager Environmental Investigations).*
- Vance Fulton (EBOP Land Management Officer – Lakes Quality).
- Clive Tozer (EBOP Operational Services Group Manager).*
- Andrew Wharton (EBOP Environmental Planner).
- Marc Fauvel (RDC Environmental Planner).
- Ian McLean (RDC Environmental Planner).
- Greg Manzano (RDC Utilities Planning Manager).*
- Paul Sampson (RDC District Engineer).*
- Nigel Wharton (RDC Environmental Services Director).*

During the approximately one year of Action Plan development, the Working Party met five times – on 30 April 2003, 28 May 2003, 6 August 2003, 3 September 2003 and 22 October 2003. Two subsequent meetings, on 25 January 2004 (following a community Open Day) and 29 July 2004 were attended by both Working Party members and interested members of the local community.

Following its sign-off in mid-2004, the LOCMAP Working Party met a further four times – on 24 November 2004, 17 March 2005, 28 September 2005 and 31 May 2006. At each of these meetings, further information was presented and occasionally further recommendations were made.

Key discussion points and outcomes from each Working Party meeting are summarised as follows. Note that there is evidence from the Minutes of Working Party meetings that there were a small number of vocal community members that were interested in influencing the process in particular directions, including an early call to shortcut the action plan development process and go straight to implementation of one or more options. It is unclear from the Minutes as to the extent of Te

Arawa Maori Trust Board (TAMTB) input into discussions throughout the Action Plan development process. Also note that there was subsequent (ie, 2004/05) suggestions from farming representatives that the farming sector had been under-represented in the Lake Okareka Action Plan Working Party and that the Working Party process had felt 'closed' from wider community input.

Table 18: Lake Okareka Action Plan – Summary of Working Party meetings

Meeting date	Key discussion points and outcomes
30 April 2003	<ul style="list-style-type: none"> – Welcome, background, introductions and expectations. – Communications strategy (EBOP). – Feedback on Draft Working Paper. – SWOT analysis re conversion of pasture to forest. – Local community member idea to place a pipe from outlet to bottom of the lake. (Note: Considerable further investigation was undertaken of this 'Hypolimnetic discharge' suggestion). – Discussion about faeces from Black Swans. – Agenda for next meeting (series of SWOT analyses).
28 May 2003	<ul style="list-style-type: none"> – Community interest in the issue of sewerage reticulation (discussion point). – SWOT analyses – Sewerage, Wetlands, Urbanisation. – Mini-SWOTs – Lakeweed harvesting, Control of waterfowl, Public education, Deep water outflow. – Agreement to form smaller focus groups to further develop the SWOT analyses. Focus groups proposed for – Land use/forestry options, Reticulation, Wetlands, Urbanisation.
6 August 2003	<ul style="list-style-type: none"> – Corrections to the last Minutes. – Communications – update on forthcoming community update newsletter (EBOP). – Feedback and discussion from focus groups – Land use/forestry/urbanisation (combined), Wetlands, Sewerage. – In relation to land use change, the sub-committee commissioned two consultancy reports to provide economic information (scheduled to report back in Sept/Oct 2003). – Feedback on evaluation system (EBOP). – General discussion. – Revised timetable – public consultation scheduled for November 2003.
August 2003 – Community Newsletter # 1	
3 September 2003	<ul style="list-style-type: none"> – Summary of local government decision-making process requirements as per the Local Government Act (Cr Oppatt). – Overview of funding options for Action Plan implementation (EBOP and RDC). – Feedback and discussion on EBOP draft paper re 'Evaluation of Nutrient Reduction Options'. – Brief update from each of the three focus groups. – Report and discussion re Best Management Practices for pastoral farming (ie, Total Nutrient Management) (EBOP). – Discussion on how nutrient reduction gains will be protected, including possible regulatory controls and related matters. – Mention of an Evaluation focus group that will meet prior to the next full Working Party meeting.
22 October 2003	<ul style="list-style-type: none"> – Presentation of consultancy reports: (a) An economic evaluation of land use change options in the Rotorua Lakes district; and (b) Economic impact on Rotorua District and Bay of Plenty Region of water quality induced changes to land use and tourism in Rotorua Lakes catchments. Subsequent discussion. – Consultancy presentation on the development of lifestyle blocks. Subsequent discussion. – It was suggested that the preliminary TLI targets should err on the side of caution, and be adjusted by 10%. – Report and recommendations (8) presented re an evaluation of nutrient reduction options. Subsequent discussion. – Next step is to draft up an Action Plan document. Focus group (sub-committee) formed for this purpose, including staff from EBOP and RDC. Consultative package will be linked with LTCCP processes (EBOP and RDC). – The eight recommendations were adopted unanimously. – Newsletter and media release suggested (EBOP).
December 2003 – Community Newsletter # 2	

Meeting date	Key discussion points and outcomes
January 2004 – Community Open Day including Q&A session and speeches	
25 January 2004	<ul style="list-style-type: none"> – Community meeting – Attended by both Working Party members and interested members of the local community. – A series of questions were submitted before hand by LORRA. – RDC presentation on progress toward Lake Okareka Sewerage Scheme. – Consultancy presentation on Wastewater issues and options. – RDC presentation on Options for change (environmental planning perspective). – EBOP presentation on Lake Okareka Water Quality. – EBOP presentation on Engineering and treatment options.
July 2004 – Community Newsletter # 3	
29 July 2004	<ul style="list-style-type: none"> – Community meeting – Attended by both Working Party members and interested members of the local community. – Noted that the Action Plan was adopted in June 2004 by EBOP, RDC and the Lakes Joint Strategy Committee. – RDC presentation – Implementation of the Okareka Sewerage Scheme. – NIWA presentation – Wetlands for nutrient removal. – EBOP presentation – Feasibility of the Hypolimnetic pipeline option. – Q&A session. – Presentation from 'larger landowners' group.
24 November 2004	<ul style="list-style-type: none"> – EBOP presentation on latest water quality monitoring results. – RDC presentation on implementation of the Okareka Sewerage Scheme. – RDC presentation on Variation 12. Environment Court ruled in favour of RDC. Full catchment excluding existing settlement is now zoned rural. Although 'bush settlement' is a non-complying activity, an application would be supported by the Lake Action Plan and the Environment Court. – Subsequent discussion various topics including sewerage implementation, bush settlements and carbon sequestration. – Focus group (sub-committee) set up to investigate the benefits of bush settlements for reducing nutrient export. – EBOP presentation on the Feasibility of the Hypolimnetic pipeline option. General support to continue progress towards a consent application to apply Phoslock. – Presentation on the Millar Road Constructed Wetland option. Recommended that this not be pursued in the short to medium term due to cost-benefit ratio. – EBOP presentation on Regional Air Plan Review (possible proposal to control aerial top dressing). – RDC presentation on Ministry of Health funding process for Okareka Sewerage Scheme.
15 February 2005	<ul style="list-style-type: none"> – Meeting of the Subdivision (bush settlements) sub-committee. – Presentation by RDC and EBOP.
17 March 2005	<ul style="list-style-type: none"> – RDC presentation on planning and public consultation update for sewerage reticulation. – EBOP presentation on NPLAS (property-specific nutrient model). 1.5 FTEs have been created to manage farm nutrient benchmarking. – EBOP presentation about Review of Rule 11. – Community member presentation on an alternative proposal to Rule 11. – Feedback from discussions of the bush settlement sub-committee. – Meeting of the Land Use Change Sub-Committee. – Introduction and general discussion about the Lakes A Zone rules. – RDC presentation on Lakes A planning constraints (using GIS maps). – Discussion around tradeable development rights and related topics. – NPLAS demonstration.
August 2005 – Community Newsletter # 4	
September 2005 – LOCMAP Implementation Update # 1	
28 September 2005	<ul style="list-style-type: none"> – RDC presentation on update for sewerage reticulation. Subsequent discussion. Also a brief update on wastewater strategy. – NIWA presentation on Lake Okareka Reed Beds. – EBOP presentation on Phoslock application to Lake Okareka. Subsequent discussion. – Ngati Whakaue presentation on Crater Lake Park proposal. Subsequent discussion. – Brief feedback from discussions of the bush settlement sub-committee. Proposal to wind up this sub-committee due to lack of progress. – EBOP presentation about Review of Rule 11. Subsequent discussion.

Meeting date	Key discussion points and outcomes
	<ul style="list-style-type: none"> - EBOP – Lakes Action Plan Update. - Other business.
31 May 2006	<ul style="list-style-type: none"> - Urgent matter for discussion – Okareka lake levels. Community concerns that the size of the current outlet was inadequate to cope with high rainfall events. Council officers to review these matters. - Urgent matter – Lily spraying. Landcare group concerned that herbicide was having an adverse impact on reed beds. EBOP operational staff to present at next meeting. - Urgent matter – Septic tank information. Community concern about information in a recent media release. EBOP staff to follow up. - EBOP presentation on Draft Rule 14 (diffuse nitrogen and phosphorus discharge from Okareka land use) – to replace the current Rule 11 provisions. - EBOP and Scion presentation on the effects of Phoslock application. - RDC presentation on update for sewerage reticulation. The group recommended to actively lobby MPs and other regarding central government funding. - Ngati Whakaue brief update on Crater Lake Park proposal. - EBOP – Brief presentation on fertiliser caps and application rates. - Subsequent items were deferred to the next meeting (results of mesocosm trials and any other business).
September 2006 – LOCMAP Implementation Update # 2	

Source: Derived from Minutes and other information available on EBOP website.

Outcomes focused

From a review of the meeting minutes and other information relating to LOCMAP, the process appears to have stayed largely on track in terms of addressing lake water quality improvement issues. A possible exception is the focus on lake levels, which were based around community concerns that the size of the current outlet pipe was inadequate to cope with high rainfall events of the past few years. The lake levels issue was relevant to water quality in terms of (a) low-lying septic tanks being flooded and effluent being washed into the lake, and (b) high lake levels causing increased erosion and increasing P levels entering the lake.

Overall, the process of Working Party leadership, the creation of sub-committees/focus groups for specific purposes, involvement of community members and support by RDC and EBOP staff all appear to have been effective. Community newsletters were distributed at appropriate stages of the process to ensure local residents and other stakeholders were kept informed. Community members' input helped to shape the discussions and solutions alongside expert advice. The latter was provided through an efficient, progressive series of presentations that enabled all Working Party members and other attendees to be kept abreast of latest developments. While there was some lack of standardisation in the way that community updates were provided, and an underlying issue of scientific jargon around nutrient reduction options, overall the community information was presented clearly and concisely. Also, the meeting Minutes and other documentation were clear and comprehensive.

The Action Plan development process also has a number of spin-off effects, including giving impetus to a review of EBOP's aerial top-dressing provisions.

Community engagement

(a) Pre-Action Plan consultation

Following extensive consultation with the community during 2000-2001, the long term water quality goal for Lake Okareka was set at a TLI of 3.0.

(b) Community meetings

An initial community Open Day was held on Sunday 25 January 2004 from 12:00pm to 4:00 pm. This was approximately eight months after the LOCMAP Working Party's first meeting. Hence, the

Open Day was held near the end of the Action Plan development process, only a few months before the Plan was finalized and signed off. The purpose of the Open Day was to further inform the community about the Action Plan process and options to improve the lake's water quality, and to remind people of the opportunity to make a submission on the Proposed Action Plan. It was held after the AGM of the Lake Okareka Residents and Ratepayers' Association. Short speeches were made by Grahame Hall (RDC), John Cronin (EBOP) and Fenella Playne (rural landowner). Paul Dell (EBOP) gave a presentation, with occasional comments from staff of RDC. General discussion followed, and the meeting was concluded with short speeches from Steve Chadwick (MP) and Anaru Rangihueua (Te Arawa). In total there were 66 people present at the Open Day presentation, including approximately ten Working Party members and a further eight EBOP and RDC staff.

A subsequent community meeting was held at the Okareka Community Hall on Thursday 29 July 2004 at 7:00 pm, following the adoption of the Lake Action Plan. The timing of this meeting reflects that fact that the Action Plan continued to develop following its adoption, through submissions from the community, advocacy groups, other individuals and agencies. Approximately 65 people were in attendance at the July 2005 meeting. The purpose was to provide update reports for the execution of recommendations from LOCMAP, noting that this was the action part of the plan. Paul Dell (EBOP) set the context of the meeting with regard to the adoption of LOCMAP in June 2004 by EBOP, RDC and the Lakes Joint Strategy Committee. The key recommendations and further recommendations of the hearings report and amended plan were then revisited, noting that EBOP would be producing an Implementation Schedule during the forthcoming month. It was recommended that, in order to facilitate the success of future plan projects, the community-led Working Party that initially helped develop the plan would be retained.

A further update meeting was held at Okareka Community Hall on Tuesday 25 January 2004 at 7:00 pm. This included presentations from RDC, EBOP and Opus Consultants on a range of topics including:

- Lake Okareka Sewerage Scheme Progress Report.
- Okareka Wastewater: Issues and Options.
- Lake Okareka's options for change (ie, district planning focus).
- Lake Okareka Water Quality.
- Lake Okareka Engineering and Treatment Options.

The meeting was preceded by a comprehensive set of questions posed by LORRA (the Lake Okareka Residents and ratepayers Association).

(c) Newsletters

During the Action Plan development phase, two newsletters for distributed: the first in August 2003 and the second in December 2003. A further two update newsletters were distributed following the adoption of the plan: the first in July 2004 and the second in August 2005.

Two LOCMAP 'Community Updates' have subsequently been published, summarising progress on the implementation of the Action Plan. The first of these was in September 2005 and the most recent was in August 2006. The purpose of these 'Community Updates' has subsequently be usurped by EBOP's Lakes Reports Cards, which have a more standardised approach to measurement and reporting.

(d) Bush Settlement Focus Group meetings

In addition to the community meetings described earlier, during 2005 there were also two separate meetings of the 'Bush Settlement Focus Group'. This followed a recommendation by LORRA at the LOCMAP meeting on 24 November 2004, for Working Party Sub-committee to meet and investigate the benefits of bush settlements, within the land use change category, on achieving a stated goal of reducing nutrient export versus existing land use. The objective of the Land Use

Change Sub-Committee or working group was to assess which mix of land use change would effectively remove the balance of the N and P targets remaining after the introduction of a reticulated sewerage scheme.

From an initial reading of the minutes from these two meetings, it is unclear what level of value was added to the process by the Focus Group meetings.

(e) *Community feedback on Draft Action Plan*

It is unclear from online information as to the extent that community members gave feedback on the Draft Action Plan.

Timeliness

Lake Okareka's Action Plan was signed off in mid-2004, approximately one year after the Working Party initially met in April 2003. The intention was that the process for developing the Lake Okareka Action Plan would provide a general template for use in other lakes.

During the approximately one year of Action Plan development, the Working Party met five times – on 30 April 2003, 28 May 2003, 6 August 2003, 3 September 2003 and 22 October 2003.

Following its sign-off in mid-2004, the LOCMAP Working Party met a further four times – on 24 November 2004, 17 March 2005, 28 September 2005 and 31 May 2006. At each of these meetings, further information was presented and occasional further recommendations were made.

Efficiency

An initial subjective assessment of the Lake Okareka Action Plan project is that the process was quite comprehensive and wide-ranging, and was reasonably efficient in terms of time and resources for a project of this nature. Given that the process was intended to provide a template for subsequent lake action plans, efficiency was only a minor consideration relative to the effectiveness of the process.

One comment around the tail-end of the process would be that the continuation of Working Party meetings and community input after the adoption of the Action Plan (ie, during 2005/06) opened up the possibility of getting side-tracked by pet issues and community interests that were not necessarily directly related to lake water quality.

Lake Okaro

Background information and research

Background information and research findings were presented by EBOP at an initial community meeting that was attended by a small number of local landowners. It unclear from available on-line information whether or not this information was disseminated in written for prior to the meeting. There is no on-line documentation of any subsequent community meetings or 'open days', or of any specific community update newsletters or other progress information being distributed wider than the immediate Working Party membership.

Action Plan Working Party

It is clear from the meeting attendance lists that there were lower levels of community member involvement in the Working Party discussions compared to the Lake Okareka Action Plan. Hence the discussions were more dominated by agency representatives, experts and scientists. The number of people in attendance at meetings of the Lake Okaro Action Plan Working Party ranged from approximately 10 to 15 (ie, around half the number that were present at Lake Okareka Action Plan Working Party meetings). The meetings also tended to be quite short (eg, around 1-2 hours). Involvement from TAMTB in the process appears to have been minimal.

Membership of the Lake Okaro Action Plan Working Party is not specifically defined from information available on the EBOP website. However, approximate membership can be inferred from meeting Minutes and other documents as follows (in alphabetical order). A key difference from the Lake Okareka process is that the meetings were chaired by a single person (Cr Robin Ford from EBOP) rather than being co-chaired by two people (Cr Michie from EBOP and Cr Oppatt from RDC). In addition, RDC support staff included representation from the Parks and Recreation rather than the focus on planning and wastewater staff that was evident in the Lake Okareka process. At later meetings there were also presentations from various consultants including Scion forestry scientists.

- Katie Armer.
- Rowan Armer.
- John Birchall (community member/landowner).
- June Birchall (community member/landowner).
- Shane Birchall (community member/landowner).
- Cr Bill Cleghorn (EBOP).
- Evelyn Conway.
- Harold Conway.
- Julie Conway.
- Cr Robin Ford (EBOP) (Chair).
- Mike Gaukrodger.
- Trevor Grimwood.
- Tony Lynskey (community member/landowner).
- David Marshall (Department of Conservation).
- Keith Owen (Department of Conservation).
- Mac Pacey (water skier).
- Rob Pitkethley (Fish & Game).
- Peter Staite (Ngati Whaoa).
- Nick Toell.
- Patricia Ward.

Support staff for the Working Party included the following:

- John McIntosh (EBOP Manager Environmental Investigations).
- Paul Dell (EBOP Lakes Project Coordinator).
- Andrew Wharton (EBOP Environmental Planner).
- Vance Fulton (EBOP Land Management Officer – Lakes Quality).
- Penny MacCormick (EBOP Nutrient Assessment Officer).
- Ruth Feist (EBOP Resource Planner).
- Marc Fauvel (RDC Environmental Planner).
- Walter Miller (RDC Parks Asset Manager).
- Garry Page (RDC Manager Parks and Recreation).
- Ian Wallace (RDC Landscape Architect).
- Gina Mohi (RDC Environmental Planner).

During the approximately 2 ½ years of Action Plan development, the Working Party met seven times – on 18 December 2003 (initial community meeting), 6 April 2004, 30 September 2004, 12 April 2005, 26 July 2005, 26 September 2005 and 24 August 2006. Key discussion points and outcomes from each Working Party meeting are summarised as follows.

Table 19: Lake Okaro Action Plan – Summary of Working Party meetings

Meeting date	Key discussion points and outcomes
18 December 2003	<ul style="list-style-type: none"> – Initial community meeting. – EBOP background presentation. Subsequent discussion. – EBOP presentation on the role of the lake Okaro Action Plan. – Discussion around the preferred composition of the Working Party, including the mix of community members/landowners vs additional agency representatives. – Discussion about possible nutrient reduction solutions.
6 April 2004	<ul style="list-style-type: none"> – EBOP presentation/update on Alum trials in Lake Okaro. – EBOP presentation/update on Wetland and Riparian works. – Discussion about management of the recreational reserve around the lake. – The group noted that iwi and TAMTB representation should be sought for the Working Party. – Brief discussion of about current wastewater treatment for public amenities at the lake.
30 September 2004	<ul style="list-style-type: none"> – EBOP update on Wetland and Riparian works (Shane Birchall's property). – EBOP presentation on phosphorus precipitation (Alum) trials on Lake Okaro – now discontinued. – RDC and EBOP discussion around lakebed and lake margins. – Other matters (general discussion).
12 April 2005	<ul style="list-style-type: none"> – Initial discussion about recent fish and waterfowl mortality in Lake Okaro. – EBOP presentation on Lake Okaro nutrient budget. – Consultancy presentation on the use of Limnocorral Mesocosms to test the effectiveness of various in-lake treatments. – DOC presentation on Lake Okaro Conservation Values. – EBOP update on Okaro Wetland. – EBOP update on Riparian works. – Action points were noted, including consultation with Te Arawa and Ngati Whaoa and preparation of a community update newsletter.
26 July 2005	<ul style="list-style-type: none"> – EBOP presentation on nutrient benchmarking trials of Lake Okaro catchment properties. – Initial discussion around a Draft Lake Okaro Action Plan (prepared and distributed to the Working Party members by EBOP and RDC staff). – EBOP presentation of a paper clarifying the Working Party roles and responsibilities. – EBOP update on Limnocorral Mesocosms trial.
26 September 2005	<ul style="list-style-type: none"> – Working Party feedback and amendments to the Draft Lake Okaro Action Plan. – Motion to approved the proposed Plan and forward it to the Rotorua Lakes Strategy Joint Committee.
24 August 2006	<ul style="list-style-type: none"> – EBOP presentation on the Rule 11' review process for the proposed Regional Water and Land Plan. The review will focus on tailoring rule management for property/area characteristics. – Update on Lake Okaro Action Plan implementation. – Consultancy update on proposed Z2 dosing, with subsequent discussion.

Source: Derived from Minutes and other information available on EBOP website.

Outcomes focused

From a review of the meeting minutes and other information relating to the Lake Okaro Action Plan, the development process appears to have been well-focused and effective. There was considerable ability for EBOP and RDC staff to direct the process, with input from a small number of key landowners. Lower-level issues do not appear to have sidetracked the Working Party.

Community engagement

An initial community meeting at the Lake Rerewhakaaitu Settlers Hall on 18 December 2003 was attended by a small number of landowners who subsequently remained engaged in the Working Party process. The timing of the meeting (ie, one week before Christmas Day) may have been a factor in the attendance numbers.

At the Working Party meeting on 12 April 2005 there was a suggestion from EBOP staff to prepare and distribute a community newsletter. An action point was noted around preparing a joint Okaro-Rerewhakaaitu Lakes newsletter. However, there is no further information available on-line regarding this action point.

Overall, there appears to have been less involvement from community members and landowners in the Lake Okaro Action Plan compared to the Lake Okareka Action Plan, but this is partly indicative of the smaller population and more rural nature of the Lake Okaro catchment. There is some mention in the background documents regarding the need to ensure information is posted out in sufficient time to allow for delays in rural delivery.

Throughout the Action Plan development process, attempts were made to engage local iwi (including attempts in partnership with TAMTB staff). However, these attempts do not appear to have resulted in any substantial input from iwi.

It is unclear from online information as to the extent that community members gave feedback on the Draft Action Plan.

Timeliness

The Lake Okaro Action Plan process took place over the period December 2003 to August 2006. Hence, it commenced approximately eight months after the start of the Lake Okareka Action Plan process and was completed and adopted approximately two years after the Lake Okareka Action Plan was adopted.

Efficiency

While the Lake Okaro Action Plan development process was more protracted than that of Lake Okareka, it appears to have made more efficient use of EBOP and RDC staff time and resources throughout the process, as well as drawing on local landowners' time as little as possible. The process also appears to have been more efficient due to the more limited or targeted level of engagement from local community members. The final meeting of the Working Party appears to have coincided with the formal adoption of the plan, with no further formal meetings held during the implementation stage.

There were some specific efficiencies for EBOP in terms of updating the Working Parties for the Rotoehu, Okaro and Rotorua/Rotoiti Action Plans during July/August 2005 in relation to (a) clarification of Working Party roles and responsibilities and (b) nutrient benchmarking (ie, implementation of Rule 11).

Lake Rotoehu

Background information and research

It unclear from available on-line information as to what information was disseminated in written for prior to the initial community meeting. However, comprehensive information was presented by EBOP at the initial community meeting and in subsequent Working Party meetings. Research findings were also included in the Draft Action Plan and related information made available to the public.

Action Plan Working Party

Chairmanship of the Working Party meetings appears to have been shared. The initial community meeting and one of the Working Party meetings were chaired by Cr Michie, the initial Working Party meeting was chaired by Joe Malcolm (TAMTB) and another meeting was chaired by Cr Tai Eru. It is unclear from available documents as to who was chairing the meetings held during late 2005 and late 2006, at which EBOP and RDC elected members were not present. The final Working Party meeting in February 2007 was chaired by Jim Koller, an outspoken local resident/landowner. Our understanding is that Cr Michie was no longer an elected member of EBOP by this stage of the process.

It is clear from the meeting attendance lists that there were lower levels of community member involvement in the Working Party discussions compared to the Lake Okareka Action Plan. Nevertheless, there was vocal input from a small number of local residents and landowners. Involvement from TAMTB in the process appears to have been adequate (unlike the Lake Okaro Action Plan process in which iwi input was sought but not necessarily obtained). Local Maori landowners were present during latter stages of development of the Action Plan.

The number of people in attendance at meetings of the Lake Rotoehu Action Plan Working Party ranged from approximately 10 to 20 (ie, around half the number that were present at Lake Okareka Action Plan Working Party meetings). The meetings also tended to be quite short (eg, around 1-2 hours).

Membership of the Lake Rotoehu Catchment Management Action Plan Working Party (hereafter referred to as the Lake Rotoehu Action Plan Working Party) is sourced from meeting Minutes and the finalised Action Plan (Chapter 5: Working Party Process) as follows (in alphabetical order).

- Phil Alley (Department of Conservation).
- Catherine Branson (community member).
- Jeff Branson (community member).
- Cr Tai Eru (EBOP) (Co-Chair).
- Paul Hakopa (iwi/hapu representative).
- Eben Herbert (Fish & Game).
- Mark Jenkins (community member).
- Jim Koller (community member).
- Nigel McCloud (Maori land trust representative).
- Grant McComb (farming and forestry representative).
- Mark MacIntosh (rural landowner representative).
- Joe Malcolm (TAMTB and local Maori land trusts representative (Co-Chair)).
- Mana Malcolm (Maori land trusts representative).
- David Marshall (DOC).
- Keith Marx (community member).
- Maurice Meha (Maori land trust representative).
- Simon Robertson (rural landowner).
- Cr Rosemary Michie (EBOP) (Co-Chair).
- Lisa Singfield (community member).

- Chris Tanner (NIWA).
- Robyn Waimarama-Skerret (Maori land trusts representative).
- Tony Whata (Maori land trust representative).

Support staff for the Working Party included the following:

- John Douglas (EBOP Land Management Adviser).
- John McIntosh (EBOP Manager Environmental Investigations).
- Paul Dell (EBOP Lakes Project Coordinator).
- Andrew Wharton (EBOP Environmental Planner).
- Vance Fulton (EBOP Land Management Officer – Lakes Quality).
- Richard Mallinson (EBOP Pest Plant Officer).
- Penny MacCormick (EBOP Nutrient Assessment Officer).
- Ben Banks (EBOP).
- Matthew Bloxham (EBOP Environmental Scientist).
- Andy Bruere (EBOP Rotorua Lakes Programme Manager).
- Stephen Colson (RDC Planning Manager).
- Marc Fauvel (RDC Environmental Planner).
- Ian Wallace (RDC Landscape Architect).
- Chandran Veetil (RDC).
- Ana Vidal (RDC Environmental Planner).
- Roku Mihinui (TAMTB).
- Hera Smith (TAMTB).

During the approximately four years of Action Plan development, the Working Party met at least eight times – on 8 December 2003 (initial community meeting), 1 June 2004, 28 July 2004, 27 July 2005, 6 October 2005, 6 June 2006 (follow-up community meeting), 4 October 2006 and 21 February 2007. (Note that the EBOP website also refers to a 25 March 2004 meeting, however the on-line notes to this meeting are identical to the Minutes from the 6 April 2004 meeting of the Lake Okaro Action Plan Working Party).

Key discussion points and outcomes from each Working Party meeting are summarised as follows.

Table 20: Lake Rotoehu Action Plan – Summary of Working Party meetings

Meeting date	Key discussion points and outcomes
8 December 2003	<ul style="list-style-type: none"> – Initial community meeting. – EBOP presentation on fencing, planting and water supply works done around Lake Rotoehu, followed by Q&A session. – EBOP presentation on Lake Rotoehu's current environmental quality, causes of degradation and nutrient reduction targets, followed by Q&A session. – EBOP presentation on the role of the Lake Rotoehu Action Plan, followed by Q&A session. – Discussion around the preferred composition of the Working Party, including the mix of community members/landowners vs agency representatives.
25 March 2004 (?)	<ul style="list-style-type: none"> – Minutes from this meeting are not available on-line, as they appear to have become conflated with the 6 April 2004 Minutes of the Lake Okaro Action Plan Working Party).
1 June 2004	<ul style="list-style-type: none"> – Matters from previous Minutes. – EBOP presentation on the Strategy for the Lakes of the Rotorua District, and the role of Action Plans within this. Subsequent wide-ranging discussion. – Paul Dell indicated that a newsletter to Rotoehu residents would be distributed in 3-4 weeks' time.
28 July 2004	<ul style="list-style-type: none"> – Absence of Agenda headings suggests that this meeting was run as a general discussion. Topics covered included treatment boxes for small streams, possible treatment walls around lakes, riparian management, and recent earthquakes and rainfall. – An AgResearch report about land use impacts on N and P leaching was handed out. – A proposed field trip was postponed due to recent poor weather and slips.
27 July 2005	<ul style="list-style-type: none"> – EBOP presentation on Hornwort in Lake Rotoehu.

Meeting date	Key discussion points and outcomes
	<ul style="list-style-type: none"> - EBOP presentation on stream treatment box trials. - EBOP presentation on Rotoehu wetland. - EBOP presentation on riparian protection works. - EBOP presentation on nutrient benchmarking of properties in the Lake Rotoehu catchment. - EBOP presentation on Working Party roles and responsibilities. - Small amount of discussion about the option to hold smaller focus groups rather than just full Working Party meetings. - Other business, including community concerns about aerial top-dressing.
6 October 2005	<ul style="list-style-type: none"> - EBOP presentation on stream treatment box trials. - EBOP update on riparian protection works. - EBOP update on Rotoehu wetland. - Update on groundwater research in the Rotoehu catchment. - EBOP presentation on the costs and benefits of weed harvesting. - Other business (primarily a discussion of Hornwort issue). Heads-up regarding a forthcoming public meeting to discuss this.
6 June 2006	<ul style="list-style-type: none"> - Community meeting. - EBOP presentation on current water quality in Lake Rotoehu and Lake Rotoma. - Update on groundwater research in the Rotoehu catchment. - Update on Hornwort harvesting trial. - Update on Rotoehu wetland investigations. - EBOP presentation on environmental programmes in the Lake Rotoehu and Lake Rotoma catchments. - Potential actions and timeframes for the Lake Rotoehu Action Plan and the Lake Rotoma Action Plan. - Nominations for the Lake Rotoma Action Plan Working Party.
4 October 2006	<ul style="list-style-type: none"> - EBOP update presentation on stream treatment box trials, with subsequent discussion. - EBOP presentation on constructed wetland design, with subsequent discussion. - EBOP update on groundwater research in the Rotoehu catchment. - Additional discussion and guidance regarding Action Plan items. From here, EBOP staff indicated that a Draft Action Plan would be distributed for Working Party approval within the next few months. - Other business.
21 February 2007	<ul style="list-style-type: none"> - Meeting was chaired by Jim Koller. No attendance by EBOP or RDC elected members. Attendance at this meeting including local Maori landowners and farm managers. EBOP attendance was partial only, with Paul Dell attending just the opening of the meeting. - A number of people at this meeting had not been present at previous meetings. - EBOP introduced Andy Bruere, the newly appointed Rotorua Lakes Programme Manager. - Discussion around terminology used in the Draft Action Plan re 'cost of capital'. - Matters arising from previous Minutes. - Discussion around weed spraying. - Quick review of Draft Action Plan. - Further discussion about aerial top-dressing concerns. - Discussion about Taumanu Dairy Farm. - Discussion about waterfowl numbers. - Discussion about natural lake dynamics. - Discussion about wastewater calculations. - Discussion about Working Party process, including the fact that some former Elected Members and others are no longer participating. - Discussion around Hornwort harvesting. - Some discussion around constructed wetlands. - Discussion around environmental programmes for land retirement. - Brief discussion around nutrient discharge reduction estimates for dairy, sheep and beef blocks. - Discussion around OSET Plan regulation. - Discussion around weed transfers from Otautu Bay Boat Ramp. - General business, including a reminder that EBOP had still not organised a field trip on the lake for Working Party members.

Meeting date	Key discussion points and outcomes
	– A subsequent meeting was scheduled for 28 March 2007, but there is no record of this on the EBOP website.
August 2007 – Community update newsletter # 1	

Source: Derived from Minutes and other information available on EBOP website.

Outcomes focused

From a review of the meeting minutes and other information relating to the Lake Rotoehu Action Plan, the development process appears to have been well-focused and effective throughout the initial stages but became increasingly difficult to manage as the process dragged into its third and fourth years. During the later stages of the process, the Working Party was increasingly dominated by local community concerns.

Community engagement

An initial community meeting at the Rotoma/Rotoehu Community Hall on 8 December 2003 apparently had a reasonable turnout, although exact numbers of attendees were not documented in the Minutes of that meeting. From the Q&A notes there appears to have been strong engagement. According to the notes from the initial community meeting, the Minutes and a Draft Working Paper were distributed to all members of the Rotoehu community.

At the 1 June 2004 Working Party meeting there was reference to a proposed community update newsletter, but details of this newsletter are not available on-line.

An August 2007 community newsletter was distributed to coincide with the release of the Proposed Action Plan. This was labeled 'Newsletter No 1', which suggests there was no prior information distributed in this form. The newsletter was clear and concise, and referenced a submission form on the last page of the Draft Action Plan. Approximately 3-4 weeks appears to have been provided for community feedback opportunities on the Draft Action Plan.

Timeliness

The Lake Rotoehu Action Plan process took place over the period December 2003 to late 2007. Hence, it started at approximately the same time as the Lake Okaro Action Plan process but took an additional one year to be finalised (ie, approximately four years in total). According to presentation notes by Paul Dell at the initial community meeting in late 2003, the original intention was to develop a draft Action Plan over a one-year period.

Efficiency

There were some specific efficiencies for EBOP in terms of updating the Working Parties for the Rotoehu, Okaro and Rotorua/Rotoiti Action Plans during July/August 2005 in relation to (a) clarification of Working Party roles and responsibilities and (b) nutrient benchmarking (ie, implementation of Rule 11).

There were also some efficiencies around a combined Lake Rotoehu and Lake Rotomoa community meeting held in June 2006, which provided a progress report on the Lake Rotoehu Action Plan and an introduction to the forthcoming process for developing the Lake Rotoma Action Plan. The combined meeting was held at the Rotoma/Rotoehu Community Hall.

While the Lake Rotoehu Action Plan development process was more protracted than either the Lake Okareka or Lake Okaro Action Plan processes, it appears to have made reasonably efficient use of EBOP and RDC staff time and resources. However, some inefficiencies are likely to have crept into the process due to staff turnover throughout the development process.

Lakes Rotorua and Rotoiti

Lake Rotorua and Lake Rotoiti are linked by the Ohau Channel so what happens in Lake Rotorua affects water quality in Lake Rotoiti. For this reason an Action Plan was developed jointly for both lakes, while noting that they face different issues that require different solutions.

From the volume of paperwork associated with the development of the Action Plan for Lakes Rotorua and Rotoiti, it is clear that this process was substantially larger than any of the three previous action plan processes.

Background information and research

An initial newsletter in September 2003 referred to a set of draft working documents for the Lakes Rotorua and Rotoiti Action Plan (these are not currently available on-line). From Minutes, it is recorded that additional information was distributed by way of pamphlets to attendees at the Action Plan launch meeting. Considerable background information and research was presented throughout the Working Party/Focus Groups process, including information presented by a Technical Advisory Group of independent experts.

Action Plan Working Party

From the Minutes of an initial community meeting, it appears that EBOP's proposal was to establish a separate Working Party for each of Lake Rotorua and Lake Rotoiti, along with a combined Working Party which would meet less often and would only look at significant issues common to both lakes. However, at the meeting a motion was passed 'to give strongest consideration to the merging of the Rotorua and Rotoiti Working Parties'.

At the initial community launch meeting, Cr Bill Cleghorn was nominated to be the Chair. Cr Cleghorn subsequently chaired almost every Working Party meeting, except those that we was unable to attend.

Attendance at the initial 2-3 meetings of the Working Party was high, with around 25-30 stakeholder representatives and a minimal number of staff and experts. However, around the fourth meeting there started to be a drop-off in numbers, leveling to a core of approximately 11-13 representatives for the final half of the process (meeting onward). This was paralleled by an increase in staff and expert input to the Working Party meetings. Most Working Party meetings throughout the process lasted 2-3 hours.

Membership of the Lakes Rotorua and Rotoiti Action Plan Working Party can be identified from the Minutes of its first meeting on 5 May 2004 plus supplementary information from subsequent Minutes. The composition was designed by EBOP through a consultative process to ensure representation from a wide range of stakeholder groups. The membership is listed below (in alphabetical order), with an asterisk (*) next to the names of people in attendance or who gave apologies for the initial meeting.

- David Austin (passive recreation users representative).*
- Brentleigh Bond (Lakes Water Quality Society).
- Sally Brock (Rotoiti Residents and Ratepayers Association).*
- Cr Bill Cleghorn (EBOP) (Chair).*
- Lance Eccles (boat owners representative).*
- Te Ururoa Flavell (central government).*
- Rikihana Hancock (local hapu representative).
- Neil Heather (sheep/beef farmer representative).*
- Ben Hunga (local hapu representative).*
- Harvey James/Eldad Collins (tourism industry representative).*
- Te Kuramea Karere (local hapu representative).*

- Joe Malcolm (a trustee of various land trusts).*
- Gifford McFadden (Federated Farmers).*
- Lachlan McKenzie (Federated Farmers).*
- Ian McLean/Nick Miller (Lakes Water Quality Society).*
- David Marshall (Department of Conservation).*
- Jamie Paterson (dairy farming representative).
- Kath Peebles (urban representative).*
- Anaru Rangihueua (TAMTB).*
- Kit Richards/Colin Maunder (forestry industry representative).*
- Cr Glenys Searancke (RDC – stand-in Chair).*
- Malcolm Short (FOMA).*
- Steve Smith/Rob Pitkethley (Fish & Game).*
- Mary Stanton/Jim Stanton.*
- Joseph Tahana (local hapu representative).*
- Laurence Tamati/William Emery/Te Ariki Morehu (local hapu representative).*
- Rick Vallance (Ngati Whakauae Tribal Lands).
- David Whata-Wytcliffe (local hapu representative).*
- Frederick Whata (local hapu representative).*
- Margaret Wineti (*now deceased*) (TAMTB).*
- Graeme Young (rural lifestyle block representative).*

Support staff for the Working Party included the following:

- John McIntosh (EBOP Manager Environmental Investigations).*
- Paul Dell (EBOP Lakes Project Co-ordinator).*
- Clive Tozer (EBOP Operational Services Group Manager).
- Andrew Wharton (EBOP Environmental Planner).
- Paul Scholes (EBOP Environmental Scientist).
- Amy Reid (EBOP).
- Vance Fulton (EBOP Land Management Officer – Lakes Quality).
- Bruce Gardner (EBOP Pollution Prevention Manager).
- Ruth Feist (EBOP Resource Planner).
- Penny MacCormick (EBOP Nutrient Assessment Officer).
- Paul Sampson (RDC District Engineer – 2003/04 only).*
- Nigel Wharton (RDC Director Environmental Services).*
- Marc Fauvel (RDC Environmental Planner).
- Peter Dine (RDC Works Manager).
- Stephen Colson (RDC Planning Manager).
- Greg Manzano (RDC Utilities Planning Manager).
- Ian Wallace (RDC Landscape Architect).

During the approximately four years of Action Plan development, the Working Party met 14 times (including the initial community launch meeting) along with a substantial number of additional focus group (ie, sub-committee) meetings during the same period. This was a significantly greater level of activity than in the previous action plan processes, reflecting the greater scale and level of importance of the Action Plan process to local communities.

Key discussion points and outcomes from each Working Party and sub-committee meeting are summarised as follows.

Table 21: Lakes Rotorua and Rotoiti Action Plan – Summary of Working Party meetings

Meeting date	Key discussion points and outcomes
September 2003 – Community update newsletter # 1	
26 January 2004	<ul style="list-style-type: none"> – Initial launch meeting. Approximately 250 people in attendance. – Mihi. – Speeches and introduction by various dignitaries (EBOP, RDC, TAMTB and central government). – EBOP – Introduction and overview. – Additional technical information from Prof David Hamilton. – Q&A session (technical questions). – General discussion, including around the preferred composition of the Working Party. 'A motion was passed that there be a steering committee to guide the working party process'. Bill Cleghorn was nominated to be the Chair.
April 2004 – Community update newsletter # 2	
5 May 2004	<ul style="list-style-type: none"> – First Working Party meeting, attended by 26 people. – Round of introductions. – Brief discussion about Working Party composition (dairy sector representation). – EBOP overview of water quality science to date. – Report on the findings of the Technical Advisory Group (TAG). – Comment from Joe Malcolm re financial losses from prospective land use change. – Frederick Whata presented a history of works around the Ohau Channel/ Rotoiti Outlet, including the reasoning behind the floodgates currently at the outlet of Lake Rotoiti. – General discussion on a range of topics. – EBOP – Implementation framework. – EBOP proposed a series of focus group to be established, based around (a) groyne/diversion inflows, (b) diversion/oxygenation, (c) wetlands, (d) sewage treatment/stormwater/urban issues, (e) flocculants/treatment – inflows. A further focus group was added by the Working Party: (f) water levels and associated control structures. – EBOP – Mandate of the Action Plan. – Initial discussion of communications strategy, including website information and community update newsletters. – General discussion on a wide range of topics. – A Land Use focus group was suggested for the medium term. – Further discussion about the focus areas for proposed sub-committees. – Nominations for membership in focus groups were deferred until the next meeting.
9 June 2004	<ul style="list-style-type: none"> – Working Party meeting # 2. – Attendance numbers are not recorded in the Minutes but are likely to be similar to the first meeting. – Announcement of an RDC decision to proceed with a sewerage scheme for urban areas around the eastern end of the Lake Rotorua basin. – Position Statement summary from TAG. – NIWA presentation on recent changes in stream nitrogen and the links to catchment land use. – GNS presentation on Draft Lake Rotorua nitrogen fluxes (t/yr). – NIWA presentation on pathways of nitrate movement. – EBOP presentation on the nutrient reduction target for Lake Rotoiti. – Q&A session for the TAG. – Break for a light supper. – Further technical updates. – EBOP – Communications strategy. – Potential focus groups were suggested, with staff assistants assigned to each. The Working Party, after some discussion, agreed to establish three focus groups: (a) in-lake treatment, (b) land use change and (c) urban issues. The first urgent order of action was identified as the Ohau Channel groyne.
8 July 2004	<ul style="list-style-type: none"> – Focus group meeting – Ohau Channel groyne. – Brief summary of the science (based on a NIWA report). – Focus group recommendations and other potential options.
8 July 2004	<ul style="list-style-type: none"> – In-lake Focus Group meeting. – Focus is around lake levels and control structures. – EBOP – Background presentation.

Meeting date	Key discussion points and outcomes
	<ul style="list-style-type: none"> - Q&A session.
15 July 2004	<ul style="list-style-type: none"> - In-lake Focus Group meeting. - Focus is around spring flow diversions. - RDC – Background presentation including options.
15 July 2004	<ul style="list-style-type: none"> - In-lake Focus Group meeting (immediately following the previous meeting, with different/expanded membership). - Focus is around Ohau Channel outflow diversion. - RDC – Background presentation. - Recommendation to proceed urgently on this action.
29 July 2004	<ul style="list-style-type: none"> - Urban Focus Group meeting. - Focus is around Rotorua sewage treatment and disposal. - RDC – Background presentation. - Q&A session.
July 2004 – Community update newsletter # 3	
11 August 2004	<ul style="list-style-type: none"> - Working Party meeting # 3. - Nimmo-Bell (consultancy) presentations on the economics of policy changes to improve water quality in Lakes Rotorua and Rotoiti. 'The economic effect on Rotorua if all dairy land was converted to forestry would be similar to a 10% decline in tourist numbers that worsening lake conditions could cause.... Conclusion: changing land use to improve water quality has substantial economic implications. Capitalising the annual value is equivalent to \$0.5 to \$1.3 billion. It is critical to ensure land owners have maximum incentive to reduce N in a profitable way to reduce this cost. Farming viability and income generation needs to continue.' - Q&A session. - AgResearch presentation on land use impacts on N and P losses, and management options, followed by Q&A. - Light supper. - Introduction of RDC's new District Engineer. - Focus group report-backs – in-lake and urban focus groups – including recommendations. - EBOP – Update on actions in progress, followed by Q&A. - Rick Vallance (Ngati Whakauae Tribal Lands) was nominated as the Chair for subsequent meetings of the Land Use Focus Group. - Close of meeting, organisational matters and items for next meeting. - Request from farming representatives for Method 35 of the Proposed Regional Water and Land Plan to be more fully consulted on.
19 August 2004	<ul style="list-style-type: none"> - Urban Focus Group meeting. - Focus is around Rotorua stormwater. - RDC presentation on Rotorua City urban stormwater quality and prediction of environmental effects. - EBOP presentation on proposed Regional Stormwater Strategy, followed by Q&A session. - Conclusions/recommendations.
20 October 2004	<ul style="list-style-type: none"> - Working Party meeting # 4. - Prof David Hamilton presentation on Ohau Channel Outflow Diversion and Modelling. - Discussion around the above presentation, guided by pre-specified topics (eg, location, scenarios, iwi consultation, etc). - Focus group report-back and discussion: Urban focus group, Land use focus group. - EBOP presentation on Methods 35 and 35A of the Proposed Regional Water and Land Plan (ie, process for the development of Lakes Action Plans, and review of Rule 11 for each lake catchment). Discussion followed, 'for clarification only'. There was concern expressed by farming representatives regarding aspects of the proposed regulatory framework and also the action plan process, including lack of decision-making power by the Working Party. - EBOP update on urgent actions. - Reply to a negative external newsletter article on the Action Plan process. A Working Party written formal response was agreed.
11 November 2004	<ul style="list-style-type: none"> - In-lake Focus Group meeting. - Focus is around Flocculants.

Meeting date	Key discussion points and outcomes
	<ul style="list-style-type: none"> - EBOP background presentation. - Presentation on previous laboratory and field trials with flocculants. - Presentation on stream flocculant trials. - Presentation on lake flocculant trials. - Other discussion points. - Support was expressed by the group for flocculant dosing in various streams.
December 2004 – Community update newsletter # 4	
January 2005 – Community update presentation (Pikiao Rugby Clubrooms, Mourea)	
9 February 2005	<ul style="list-style-type: none"> - Working Party meeting # 5. - EBOP and RDC – Update on Ohau Channel Outflow Diversion (including results from modeling by TAG), followed by discussion. - EBOP noted that a newsletter about the above item would be distributed in March including a request for public feedback. Three major consultation meetings are also planned for April before lodging consent. - Rotorua Lakes Water Sports Trust – Presentation on recreational uses of the Rotorua lakes, and a call for unified action to improve lakes water quality. - Light supper. - Rotorua Lakes and Land Trust presentation. RLLT is a collection of key stakeholders seeking to better lake water quality and at the same time make best use of land around the lakes. It was formed due to unrest over 'lack of action on restoring the lakes'. It is community-led and funded by the Sustainable Management Fund (SMF) from the Ministry for the Environment, to encourage greater community involvement. The Trust has employed a Project Manager (Melanie Schauer). - Further information by Rick Vallance about the above initiative and its goals. - Focus group report-back and discussion: In-lake focus group. - EBOP update on urgent actions. - Any other business.
March 2005 – Community update newsletter # 5	
24 March 2005	<ul style="list-style-type: none"> - Land Use Change and Management Focus Group meeting. - Summary of conclusions from Land Use TAG meeting. - N and P reduction targets. - Rotorua Action Plan technical projects. - Rule 11. - Sources of further information. - Potential land use management/change solutions. - Discussion of the above.
27 April 2005	<ul style="list-style-type: none"> - Working Party meeting # 6. - Presentation by BOP Electricity – proposed hydroelectric scheme, followed by Q&A. - Fish & Game presentation – Sports fish and game bird management in the Rotorua lakes, followed by Q&A. - Light supper. - EBOP update on the Ohau Channel Diversion consent application and consultation outcomes, followed by Q&A. Some concern was expressed about the robustness of the consultation process and lack of time for meaningful input from the Working Party. - Focus group report-back and discussion: Land use focus group. - EBOP – Update on the timeline for various Rotorua lakes projects, followed by Q&A.
July 2005 – Community update newsletter # 6	
3 August 2005	<ul style="list-style-type: none"> - Working Party meeting # 7. - EBOP presentation on Working Party roles and responsibilities. - EBOP update on the Ohau Channel Diversion consent application. - RDC – Summary of 2004/05 summer stormwater sampling test results. - EBOP presentation on nutrient benchmarking in the Lake Rotorua and Rotoiti catchments, followed by discussion. - Light supper. - EBOP presentation on alum dosing of the Puarenga and Utuhina streams. - Any other business.
28 September 2005	<ul style="list-style-type: none"> - Urban Focus Group meeting. - Focus is around Rotorua stormwater. - RDC presentation on urban nutrient budget and stormwater management., followed by

Meeting date	Key discussion points and outcomes
19 October 2005	<p>discussion.</p> <ul style="list-style-type: none"> – Land Use Change and Management Focus Group meeting. – Progress report from the Rotorua Lakes and Land Trust. Noted that the RLLT Project Manager has moved on. – Brief presentation of initial results from on-site nutrient management research at Wharenui Farm (Ngati Whakaeue Tribal Lands). – Research results from Toenepi trials and implications for groundwater movement of nutrients. – Presentation on Best Management Practices (BMPs), including nitrification inhibitors. – Update on groundwater research in the Lake Rotorua catchment. – Discussion around how the data collected by EBOP will be use (ie, intellectual property concerns, and effects on land use options). – Rule 11 Fact Sheet (nutrient benchmarking process).
26 October 2005	<ul style="list-style-type: none"> – Working Party meeting # 8. – EBOP update on the Ohau Channel Diversion consent application. – EBOP presentation on Lake Rotorua modeling scenarios, followed by discussion. The presentation emphasised the importance of in-lake treatment of sediments. – Light supper. – Kaingaroa Timberlands – Presentation on lakes water quality from a plantation forestry perspective, followed by discussion. – Focus group report-back and discussion: Urban focus group. – Any other business.
22 February 2006	<ul style="list-style-type: none"> – Working Party meeting # 9. – EBOP update on lakes project actions. – GNS presentation on Lake Rotorua groundwater study, followed by Q&A. – EBOP update on nutrient reduction targets for Lake Rotorua. N target has been revised on the basis of feedback from TAG. Q&A followed. – Light supper. – EBOP/TAG – Presentation on updated modeling, followed by Q&A. – Any other business.
26 April 2006	<ul style="list-style-type: none"> – In-lake Focus Group meeting. – Focus in on Tikitere geothermal diversion. – Background presentation. – Options: Pros and cons. – Recommendation to the Working Party.
26 April 2006	<ul style="list-style-type: none"> – Working Party meeting # 10. – AgResearch presentation on N and P loss mitigation research, followed by Q&A. Aiming to develop a BMP toolbox with farmers. – EBOP update on nutrient reduction targets for Lakes Rotorua and Rotoiti. – Supper break. – EBOP summary of the PCE report on Rotorua lakes. – Federated Farmers presentation – Summary of Dairy Industry Strategy for Sustainable Environmental Management. – Focus group report-back and discussion: In-lake focus group. – EBOP update on urgent actions. – Any other business.
30 May 2006	<ul style="list-style-type: none"> – Land Use Change and Management Focus Group meeting. – Paul Dell – Opening address regarding the role and focus of the group. – EBOP presentation on proposed Regional Targeted Rate for Rotorua lakes restoration, followed by discussion. Debate ensued between farming representatives and EBOP staff. – Proposal/discussion re an independent agency to hold Rule 11 benchmark information. – Presentation and discussion regarding in-stream nutrient mitigation. – Discussion about regional cross-boundary nutrient benchmark consistency (ie, with Taupo). – Discussion about future research requirements. – EBOP – brief overview of the general approach to new Rule 11s for individual catchments.
31 May 2006	<ul style="list-style-type: none"> – Nutrient Target Focus Group meeting.

Meeting date	Key discussion points and outcomes
	<ul style="list-style-type: none"> - EBOP overview of nutrient budgeting to date, followed by discussion. - Two options for overall directions were proposed by focus group attendees.
8 June 2006	<ul style="list-style-type: none"> - Working Party meeting # 11. - EBOP update on decisions re proposed targeted rates. - RDC Tourism Marketing – Presentation on tourism and the Rotorua lakes, including survey results re lake water quality perceptions by Aucklanders. - EBOP presentation on the allocation of nutrient reduction targets for Lakes Rotorua and Rotoiti, followed by Q&A and discussion. - Supper break. - EBOP update presentation on flocculant trials. - Focus group report-back and discussion: Land use focus group.
June 2006 – Community update newsletter # 7	
5 September 2006	<ul style="list-style-type: none"> - Land Use Change and Management Focus Group meeting. - AgResearch presentation on nitrogen losses and nutrient models, including Q&A. - Lunch break. - Presentation and discussion of fertiliser/BMP draft guidelines. There was a suggestion from the group to establish a farmer-driven group to work on BMP strategy. - RLLT presentation on Rotorua lakes research inventory. - Follow-up questions from previous focus group meeting.
25 October 2006	<ul style="list-style-type: none"> - Land Use Change and Management Focus Group meeting. - Update on meetings between farming representatives and Joint Lakes Strategy Committee. - Consultancy presentation on current research initiatives relevant to the Rotorua lakes. - EBOP report-back on dairy farmer and EBOP one-on-one discussions. The greatest farmer concerns related to the dual impact of Rule 11 and targeted rates. Discussion followed. - EBOP presentation on investigation into nutrient management practices. - Dexcel presentation on Dairy Industry Strategy for Sustainable Environmental Management. - Discussion about the focus group's input to nutrient target setting and the Rotorua/Rotoiti Action Plan.
1 November 2006	<ul style="list-style-type: none"> - Working Party meeting # 12. - EBOP update on Environment Court approval for Ohau Channel Diversion. - EBOP – Proposed establishment of a Hamurana diversion focus group. - EBOP – Update on Lake Rotorua lakebed sediment treatment, followed by Q&A. - EBOP – Updated lakes project timelines. - Presentation and discussion around a first draft Action Plan. There was some criticism regarding the structure and content of this draft. - Discussion around the Rule 11 Review –'protecting gains made'. - Any other business.
December 2006 – Community update newsletter # 8	
28 February 2007	<ul style="list-style-type: none"> - Working Party meeting # 13. - EBOP introduced Andy Bruere, the newly appointed Rotorua Lakes Programme Manager. - EBOP update on Ohau Channel Diversion. - Focus group report-back and discussion: Hamurana diversion focus group. - EBOP update on Rule 11 Review. Also some initial discussion about nitrogen trading. - Presentation and feedback on updated Draft Action Plan. - Light supper. - Discussion in the Draft Action Plan (continued).
27 February 2007	<ul style="list-style-type: none"> - In-lake Focus Group meeting. - Focus around Hamurana Diversion. - RDC presentation on Beca feasibility study, followed by Q&A. - EBOP presentation of NIWA reports, followed by Q&A. - Prof David Hamilton presentation on lake nutrient modeling, followed by discussion. - Recommendation to carry out more work to find out the best method to control sediment release.
August 2007 – Community update newsletter # 9	

Source: Derived from Minutes and other information available on EBOP website.

Outcomes focused

While there was considerable robust debate during the Working Party process, particularly during latter stages and within the Land Use Focus Group, overall the participants remained outcomes-focused. Communication exchanges between farming representatives and EBOP helped to ensure that the perspectives of both sides were thoroughly explored and understood.

Community engagement

A total of nine community update newsletters are indicated on the EBOP website, commencing with an initial newsletter in September 2003 that signaled a public meeting in January 2004 to establish a Working Party. The initial newsletter also referred to a set of draft working documents for the Lakes Rotorua and Rotoiti Action Plan (these are not currently available on-line). From Minutes, it is recorded that additional information was distributed by way of pamphlets to attendees at the Action Plan launch meeting.

There were approximately 250 people in attendance at the Action Plan launch meeting on 26 January 2004, reflecting the importance of this Action Plan to local communities.

Community newsletters were published as follows:

- September 2003 – Newsletter # 1.
- April 2004 – Newsletter # 2.
- July 2004 – Newsletter # 3 (not available on-line).
- December 2004 – Newsletter # 4.
- March 2005 – Newsletter # 5.
- July 2005 – Newsletter # 6.
- June 2006 – Newsletter # 7.
- December 2006 – Newsletter # 8.
- August 2007 – Newsletter # 9.

From the regularity and clear content of the newsletters, it appears that local communities were kept well-informed throughout the Action Plan development process. The circulation of various information media was reportedly around 24,000-plus households. In addition to community newsletter and website hub there were EBOP/RDC columns in the Daily Post and information disseminated through community radio networks. It is understood from meeting Minutes that TAMTB was also kept abreast of communications before they were publicly released.

In terms of community input into Working Party processes, there was a suggestion at the initial community meeting that these processes should be open for members of the community to be allowed to join in when they have a better understanding of the issues. This suggestion was heard and taken into consideration by members of the Working Party who attended the initial launch meeting. From subsequent process diagrams there appears to have been a 'Stakeholder Forum' that met in parallel or otherwise had input to the Action Plan Working Party. This comprised an open meeting where anyone could come along and hear how the Rotorua Lakes Protection and Restoration Action Programme was progressing. Also, individual Focus Groups (sub-committees) invited participation from other community members and stakeholders in their meetings.

Maori cultural protocols (mihi/karakia) appear to have been observed for a number of the Working Party meetings, however this seems to have depended on who was present at each meeting to oversee the protocols appropriately. Representatives of local hapu were well engaged in the Working Party process, at least for the initial years. It is understood from meeting Minutes that EBOP was also directly engaging with hapu representatives during the course of the project.

In addition to the core project communications and consultation, there was also more targeted consultation during the course of the project including a process specifically relating to the Ohau Channel Outflow Diversion. It is understood that presentations were made to tourism and other sectors during the course of the project.

There was robust debate between farming representatives and agency representatives (particularly EBOP) throughout the course of the development process, particularly within the Land Use Focus Group. Ultimately, in the opinion of this consultant, the communication exchanges were necessary in order to enable perspectives to be shared and explored.

Timeliness

The Lakes Rotorua and Rotoiti Proposed Action Plan was developed over the period January 2004 to August 2007. According to information on the EBOP website (accessed 3 June 2010), the Proposed Action Plan 'was recently released for public submission' (ie, in late 2007). The development process started at approximately the same time as the Lake Okaro and Lake Rotoehu processes and took around the same length of time as the Lake Rotoehu Action Plan (ie, approximately four years). Considerable enthusiasm and activity occurred throughout the duration of the Action Plan development process. During the latter years, meeting timetables were largely determined by external milestones such as new research results and the completion of key stages of urgent actions (eg, in-lake treatment trial results, the Ohau Channel Diversion consenting process, etc).

There has been some delay between finalisation of the Action Plan and formal adoption. A copy of the final version of the Lake Rotorua/Rotoiti Action Plan (dated July 2009) has been received from EBOP via e-mail. Our understanding is that this has been approved by the Joint Strategy Group, RDC and Te Arawa Lakes Trust but has not yet been formally adopted by EBOP. Our understanding is that this was due to effective lobbying by the Lakes Water Quality Society regarding the relatively low nutrient reduction targets in the Action Plan relative to the required level of nutrient reduction to achieve the desired long-term TLI target.

Additional information about the matter above is contained in an update from the Chief Executive of EBOP to the Rotorua Te Arawa Lakes Strategy Group dated 12 November 2009. In summary, the status of the Lakes Rotorua and Rotoiti Action Plan as at November 2009 was:

- Approved by the RTALSG.
- Ratified by the Te Arawa Lakes Trust.
- Ratified with a review caveat by RDC.
- Let to lie on the table by EBOP.

According to the EBOP update report:

"Overall the Action Plan as it stands is a robust document that has been through considerable scientific, public and governance input. All parties recognise that the Action Plan is a non-statutory document that has been designed to adapt and respond to changing circumstances, emerging issues and advancements. For example the review and development of new policies, experience gained through the success/failure of implementing actions and new information and advances in science and technology....

Maintaining a focus on achieving the operational outputs despite decisions on the Action Plan is important if improvements are to be made to the water quality of the two lakes. It is considered that delay in the ratification or the commencement of a review of the Action Plan should not divert resources or impact on the delivery of funded operational activities....

It is considered that the Group should agree to commence a review of the Action Plan once the second generation Regional Policy Statement and the Rotorua District Plan are in place. One of the key reasons for this recommendation relates to Environment Bay of Plenty's decision to let the

Action Plan lie on the table. It has not yet determined its course of action. Until it determines a course of action, an immediate review of the Action Plan should not take place. Another reason is that a review of the Action Plan which is currently unfunded would divert resources from other key work. Currently the resources of partner organisations required to undertake a review are committed to the development and review of critical lakes policy documents and the implementation of operational works programmes aimed at improving the water quality of the two lakes...”

Efficiency

The process for this Action Plan was less efficient than those before it, in part because of the larger scale attached to this project. An example is the higher number of Working Party and focus group meetings, and the need to provide light suppers at meetings that extended to a 2-3 hour period.

Some duplication may also have inadvertently arisen from the establishment of a Rotorua Lakes and Land Trust, comprising representatives from the farming sector, Lakes Water Quality Society and other key stakeholders. This is something over which the EBOP and RDC project managers had no control. It was formed due to unrest over ‘lack of action on restoring the lakes’. The existence of this group may have helped to stimulate additional community engagement in the Action Plan process, although this is unclear. According to a RLLT presentation to the Working Party (9 February 2005), it had enhanced the relationships between NZ Landcare Trust, EBOP, RDC, research providers and landholders.

There were some specific efficiencies for EBOP in terms of updating the Working Parties for the Rotoehu, Okaro and Rotorua/Rotoiti Action Plans during July/August 2005 in relation to (a) clarification of Working Party roles and responsibilities and (b) nutrient benchmarking (ie, implementation of Rule 11).

Lake Rotoma

Background information and research

Considerable technical information was presented to the Working Party in a concise and ordered fashion. Additional information was distributed to the community through personal networks, Resident and Ratepayer meetings and other means. It is unclear from meeting Minutes whether or not there were any community update newsletters during this period. However the local community is small and relatively close-knit, so information flows should have been sufficient. By this stage in the series of Action Plans, EBOP had refined its methods for presenting and otherwise disseminating technical information.

A copy of the Lake Rotoma Background Information document (March 2009) is available on the EBOP website. This is relatively concise (21 pages), and is written in an academic/technical style including scientific and planning jargon, tables of data and various maps and diagrams.

Action Plan Working Party

The initial composition of the Working Party was discussed at a June 2006 combined meeting of the Lake Rotoehu and Lake Rotoma communities. Names below that are associated with an asterisk (*) were identified at the June 2006 community meeting.

By this stage in the series of Lakes Action Plans, the roles and responsibilities of Working Parties (ie, their terms of reference) had been more thoroughly clarified and documented by EBOP. During the initial meeting the Lake Rotoma Action Plan Working Party, one of the first agenda items was an explanation of these roles and responsibilities, along with the purpose of the Action Plan process. This explanation was supported by written EBOP documentation ('Rotorua Lakes Action Plan Working Parties: Roles and Responsibilities').

Compared to previous Action Plan Working Parties there was greater support from EBOP staff relative to RDC staff. Near the end of the process a range of new staff that had not been involved in previous Action Plan processes were introduced (ie, EBOP Sustainable Development Team).

Attendance at Working Party meetings was fairly consistent throughout the process, with approximately 10-15 people in attendance at each meeting (around half of which were support staff). This was considerably smaller than the Working Parties for Lakes Okareka and Rotorua/Rotoiti, and similar to the size of the Working Parties for Lakes Okaro and Rotoehu.

The initial meeting on 12 July 2006 was introductory only. Due to the way that the Working Party meetings were effectively scheduled and run, the average length was just 1 to 1 ½ hours. Note that the issues and solutions for the Lake Rotoma Action Plan were less complex than in previous Action Plan processes, primarily because Lake Rotoma has a small catchment which is mostly covered with native bush and exotic forestry.

Membership of the Lake Rotoma Working Party can be identified from Minutes as follows (in alphabetical order). Those with an asterisk (*) next to their name were either present or gave their apologies for the first meeting on 12 July 2006, or were incepted at the next meeting on 6 September 2006. This list was verified through Appendix 5 of the final Action Plan. The membership was notably less fluid throughout the process compared to previous Action Plan processes, providing a relatively high level of consistency amongst the group. Chairmanship of the meeting was elected to Graeme Shirley (a local rural landowner) as an initial agenda item at the first meeting.

- Phil Alley (Department of Conservation).*
- Dawn Carter (community resident).*
- Penny Davies (rural landowner).
- Peter Davies (rural landowner).
- Nepia Dewes-Green (iwi/hapu representative).
- Cr Tai Eru (EBOP).*
- Rae Green (community resident).*
- Beverley Hughes (iwi representative).
- Cr Geoff Kenny (RDC).*
- Edwin MacKinnon (iwi/hapu representative).
- Tony Markham (community resident).
- Keith Marx (local business owner/operator).*
- Leo Meharry (community resident).*
- Anthony Olsen (iwi representative).
- Colin Perrior.
- Rob Pitkethley (Fish & Game).*
- Helen Shaw (community resident).*
- Anne Shirley (rural landowner).*
- Graeme Shirley (rural landowner) (Chair).*
- Colleen Skerrett-White (iwi/hapu representative).
- Kaiawhiti Tahana (iwi/hapu representative).*
- Cr Hawea Vercoe (EBOP).

Support staff for the Working Party included the following:

- Paul Dell (EBOP Lakes Project Co-ordinator).*
- John McIntosh (EBOP Manager Environmental Investigations).*
- Andrew Wharton (EBOP Environmental Planner).*
- Richard Mallinson (EBOP Pest Plant Officer).
- John Mather (EBOP Senior Pest Plant Officer).
- Ben Banks (EBOP).

- Andy Bruere (EBOP Rotorua Lakes Programme Manager).
- Kataraina Maki (EBOP Sustainable Development Manager).
- Nick Zaman (EBOP Senior Planner).
- Marc Fauvel (RDC Environmental Planner).*
- Chandran Veetil (RDC).
- Mark Buckley (RDC Senior Planner).

During the approximately three years of Action Plan development, the Lake Rotoma Working Party met eight times – on 12 July 2006, 6 September 2006, 8 November 2006, 7 March 2007, 25 October 2007, 7 February 2008 and 26 November 2008. Key discussion points and outcomes from each Working Party are summarised as follows.

Table 22: Lake Rotoma Action Plan – Summary of Working Party meetings

Meeting date	Key discussion points and outcomes
12 July 2006	<ul style="list-style-type: none"> – Working Party meeting # 1. – Introductions. – Election of Chairperson. – EBOP presentation – Purpose of the Action Plan, and roles and responsibilities of the Working Party. – Discussion about representation gaps on the Working Party. – EBOP presentation – Programme overview. – Any other business.
6 September 2006	<ul style="list-style-type: none"> – Working Party meeting # 2. – Administrative matters, including introduction of two new Working Party members. – Role of the Working Party (overview of the previous meetings' presentations), followed by Q&A. – Lake Rotoma nutrient budget, including 'manageable' nutrient sources, followed by Q&A. – EBOP presentation on lake level variations over time, followed by discussion and a recommendation to investigate a maximum lake level control. – EBOP presentation – Rotorua Lakes Aquatic Pest Management Plan. – Brief discussion about high lake level erosion issues for walkway between the road and the lake (this item was referred on to the Rotoma/Rotoehu Ratepayers Association). – Discussion about hornwort harvesting trial in Lake Rotoehu. – Brief EBOP presentation on the Rotorua Lakes Recreation Strategy. – Any other business.
8 November 2006	<ul style="list-style-type: none"> – Working Party meeting # 3. – EBOP presentation – Lake Rotoma nutrient budget update, followed by Q&A. – Lake Rotoma walkway – feedback from ratepayer discussions. – First analysis of options and issues for the Action Plan, including funding available for water quality actions. – Discussion – Reticulation and treatment of wastewater. – Discussion – Lake edge plantings. – Discussion – Environmental programmes and other management options for rural land. – EBOP introduction to property benchmark restrictions. – A community member put forward a proposal for discussion – some 'heated words', and the proposal was not seconded. – Discussion around research needs. – Any other business.
7 March 2007	<ul style="list-style-type: none"> – Working Party meeting # 4. – Brief further discussion about the community proposal from the previous meeting. – EBOP presentation – 'Manageable' vs 'Natural' nutrient input. – EBOP presentation – Groundwater and lake retention. – Discussion – Nutrient management practices. – EBOP presentation and discussion around septic tank options. – Discussion around lake edge planting. – EBOP presentation and discussion around Rule 11 application to the Lake Rotoma catchment. – Brief discussion on Canada geese and swans. – Initial planning toward a field trip.

Meeting date	Key discussion points and outcomes
	<ul style="list-style-type: none"> – General topics. – Comments recorded from Cr Eru on various topics.
24 July 2007	<ul style="list-style-type: none"> – Working Party meeting # 5. – EBOP presentation – Surface/groundwater catchment water balance. – Feedback from EBOP meeting with rural landowners, including discussion of Kyoto penalties. – Discussion around restrictions on future nutrient loss increases (ie, Rule 11 discussion). – RDC presentation on community wastewater reticulation. – EBOP discussion around a planting and walkway field day. – Other comments.
25 October 2007	<ul style="list-style-type: none"> – Working Party meeting # 6. – Initial business. – Prof David Hamilton presentation – Lake quality modelling. – Brief discussion around DOC fencing. – General discussion on first Action Plan draft.
7 February 2008	<ul style="list-style-type: none"> – Working Party meeting # 7. – Items from previous Minutes. – Continued general discussion on first Action Plan draft (minimal only). – EBOP presentation – Change in P estimate from septic tanks. – Discussion around OSET systems and water reticulation. – Discussion around nutrient constraint rules and land management. – Discussion around biosecurity – hornwort and didymo. – Concerns raised around enforcement of recreation rule breaches. – Any other business.
26 November 2008	<ul style="list-style-type: none"> – Working Party meeting # 8. – Introduction of new EBOP staff members. – Update and discussion on the status of a draft MoU between EBOP and three key Rotoma rural landowners. – Presentation and discussion re: Monitoring update and Draft Lake Rotoma Action Plan. This was a 'new-look' Action Plan that focused on nutrient reduction, clearly identified problems, and had actions that linked to expected outcomes. EBOP is committed to producing more concise action plans that are easy to read. Accompanying background information would be presented in a supplementary document. – Any other business.
March 2009 – Lake Rotoma Background Information document published	

Source: Derived from Minutes and other information available on EBOP website.

Outcomes focused

By and the large, the Working Party was effectively guided by EBOP staff and stayed on track regarding a focus on outcomes. There appears to have been considerable trust by the Working Party in the abilities and knowledge of EBOP staff. The agenda for each meeting was kept relatively tightly around key issues to be addressed (eg, Rule 11 discussions).

One Working Party member presented a proposition at the third meeting around the protection of private property rights, but this was not seconded, and the member no longer attended meetings after this incident. Regret was subsequently expressed that this member had opted to leave the Working Party, as they may have otherwise made a significant contribution.

Other examples of straying from a strictly 'nutrient reduction' agenda occurred in terms of time spent discussing lake level variability (in relation to erosion concerns) and concerns raised later in the Working Party process around boat speeds and other recreation and safety related issues. These were referred on to appropriate forums.

Community engagement

From the Working Party Minutes, it is unclear whether or not there was an initial community gathering or launch for the project, or how the initial Working Party members were selected to be invited to the first meeting.

From apologies noted in various Minutes, it appears there was an intention to have more engagement with iwi/hapu representatives in the Working Party process, however this seems to have been only partially unsuccessful.

Around halfway through the Action Plan development process, EBOP met with all rural landowners and with Maori Trust Block representatives. The meeting was held at a nearby marae. Feedback from this meeting was summarised for the Working Party.

The predominant sector representation in the Lake Rotoma Action Plan Working Party was community residents, reflecting the nature of local interest in the process. With the exception of Fish & Game, input from other stakeholders was minimal in terms of direct involvement in Working Party meetings.

Local communication was facilitated through Working Party member networks as well as local notice boards (eg, Rotoma Garage), community newsletters and the EBOP website.

From a 12 November 2009 report to the Rotorua Te Arawa Lakes Strategy Group from EBOP, there is an indication that 12 written and 11 verbal responses were received on the Draft Lake Rotoma Action Plan (including verbal comments from eight local residents at public consultation meetings).

Timeliness

The Lake Rotoma Action Plan was developed over the period July 2006 to November 2008, and adopted in 2009. Hence, the Rotoma process commenced at around the same time that the Lake Okareka Action Plan Working Party was winding up and the Lake Okaro Action Plan was being adopted. The Rotoma development process took a total of around three years to develop, which was 'average' compared to the previous processes. From the initial meeting of the Working Party, it was agreed that subsequent meetings would be on a 6-8 week cycle. This proved to be an effective way of maintaining momentum within the group.

Efficiency

By this stage in the series of Action Plan processes, EBOP staff had access to techniques, information materials and presentations that had been developed and evolved through the previous four processes. This set the project off on a good footing and enabled the Working Party meeting schedules to be run effectively. Due to the way that the Working Party meetings were effectively scheduled and run, the average length was just 1 to 1 ½ hours. By the Working Party's third meeting they were already discussing a first analysis of options and issues for the Lake Rotoma Action Plan. By the sixth meeting the group was reviewing a first draft Action Plan.

The process's relative efficiency may have also been influenced by the lesser degree of complexity for the Lake Rotoma Action Plan issues and solutions compared to previous lakes (all of which were considered to be 'degraded'), as Lake Rotoma has a small catchment which is mostly covered with native bush and exotic forestry. Due to this small scale, along with the relatively well developed EBOP information and processes by this stage, there was no requirement to have separate focus group/sub-committee meetings from the main Working Party meetings.

Notwithstanding the above comments, there is a suggestion recorded in the Minutes of the Working Party's final meeting that some delays had occurred in the process due to organisational/staff changes.

Lake Tarawera

Background information and research

From the slides of a presentation by made EBOP at the second Working Party meeting, it is clear that the background science and presentation of information had been refined considerably compared to earlier processes.

The level of information that was distributed through the initial Lake Tarawera community newsletter was concise and high-level.

Action Plan Working Party

By this stage in the series of Lakes Action Plans, the roles and responsibilities of Working Parties (ie, their terms of reference) had been more thoroughly clarified and documented by EBOP. During the initial introductory meeting of the Lake Tarawera Action Plan Working Party, one of the first agenda items was an explanation of its roles and responsibilities (and of the purpose of the Action Plan process). This explanation was supported by written EBOP documentation ('Rotorua Lakes Action Plan Working Parties: Roles and Responsibilities').

Compared to previous Action Plan Working Parties (with the exception of Rotoma) there was greater support from EBOP staff relative to RDC staff.

Attendance at Working Party meetings has been fairly consistent throughout the process to date, with approximately 10-15 people in attendance at each meeting (including support staff). This was similar to the size of the Working Parties for Lakes Okaro, Rotoehu and Rotoma.

The initial meeting on 3 May 2006 was introductory only, following a similar format to the Lake Rotoma process that followed shortly thereafter. All three Lake Tarawera meetings appear to have been approximately two hours in duration.

Membership of the Lake Tarawera Working Party can be identified from Minutes as follows (in alphabetical order). Those with an asterisk (*) next to their name were either present or gave their apologies for the first meeting on 3 May 2006, or were included in a list of contacts at the back of the initial community newsletter in September 2006.

- Phil Alley (Department of Conservation).*
- Terry Beckett (community member).*
- Neil Callaghan.*
- Peter Cato.*
- Sam Denford (community member/landowner).*
- John Ford (rural landowner).*
- Bryan French (local resident and recreation representative) (Chair).*
- Gerard Horgan (MAF).*
- Rangipuawhe Maika (hapu representative).*
- Pam McGrath (tourism representative).*
- Colin Maunder (forestry representative).*
- John Meikle.
- Cr Neil Oppatt (EBOP).*
- David Packham (community member).*
- Martha Peterson.
- Tedford Peterson (community member).*
- Rob Pitkethley (Fish & Game).*
- Fenella Playne (rural landowner).*
- Anaru Rangiheuea (TAMTB).*
- Rick Vallance (Ngati Whakaue Tribal Lands).*

- Katie Waaka (Rotorua Lakes and Land Trust).*
- Cr Maureen Waaka (RDC).*
- Karen Walmsley (hapu representative).*
- Bill Wheeler (forestry representative).*
- Jeremy Williams (community member).*

Support staff for the Working Party included the following:

- Colin Stace (EBOP Senior Land Management Officer).*
- Ruth Feist (EBOP Resource Planner).*
- Paul Dell (EBOP Lakes Project Co-ordinator).*
- John McIntosh (EBOP Manager Environmental Investigations).*
- Andrew Wharton (EBOP Environmental Planner).*
- Marc Fauvel (RDC Environmental Planner).*
- Anabella Vidal (RDC Environmental Planner).

Bryan French was the Working Party Chair, elected at the initial Working Party meeting.

During the approximately four months of Action Plan Working Party Minutes which are recorded on the EBOP website, the Lake Tarawera Working Party met three times – on 3 May 2006, 21 June 2006 and 8 August 2006. Key discussion points and outcomes from each Working Party are summarised as follows.

Table 23: Lake Tarawera Action Plan – Summary of Working Party meetings

Meeting date	Key discussion points and outcomes
3 May 2006	<ul style="list-style-type: none"> – Introductions. – EBOP presentation – Purpose of the Action Plan, and roles and responsibilities of the Working Party. – Election of Chairperson. – Discussion about representation gaps on the Working Party. Agreement to keep all farmers/rural landowners informed (farmland being approx 10% of the catchment land area). – Time, location and frequency of meetings. – Discussion re: Communication strategy. – A note that nutrient budget and target process information would be forthcoming at the next meeting. – General discussion of Lake Tarawera's water quality issues and risks. – Any other business. Primarily a Q&A about what is happening with the other lakes to date.
21 June 2006	<ul style="list-style-type: none"> – EBOP presentation on the overall Lakes Protection and Restoration Action Programme. – Prof David Hamilton presentation on Lake Tarawera's nutrient sources and nutrient reduction sources, followed by Q&A. – Discussion around the communication strategy, including groups to be consulted and use of community newsletters. – Discussion about a process to develop the Lake Tarawera Action Plan (eg, perhaps have a brainstorming workshop and/or focus groups). – General discussion.
8 August 2006	<ul style="list-style-type: none"> – A note that Prof David Hamilton's draft nutrient budget figures are being refined. – SWOT analysis (comprehensive). – Presentation by Ngati Whakauae Tribal Lands – Crater Lake Farm proposal, followed by discussion. – Supper. – Prof David Hamilton presentation – Lake Tarawera's 'manageable' nutrient sources. – Draft newsletter presented by EBOP for feedback. – Any other business.
September 2006 – Community update newsletter # 1	

Source: Derived from Minutes and other information available on EBOP website.

Outcomes focused

The Working Party was effectively guided by EBOP staff in terms of background information and processes. The Tarawera process had the benefit of lessons from all previous Action Plan projects. These are well documented through Q&A information in the Tarawera Working Party Minutes.

Community engagement

At the initial Working Party meeting there was an EBOP presentation on communications planning. This would include an Action Plan newsletter delivered to everyone in the area, and also absentee property owners. Other community engagement would occur through the Stakeholders Forum. EBOP's Regional Guardian newsletter could also include information about the Tarawera process. In addition, EBOP had a presence at the Lake Tarawera Ratepayers' Association AGM, and could consider hosting an Open Day at Tarawera. The EBOP website was also cited as an information source.

Ngati Whakaue Tribal Lands were involved through a presentation to the Working Party in relation to the Crater Lake Farm proposal. However, apart from this presentation it is unclear from any of the meeting Minutes as to how effective the Action Plan process was in engaging iwi/hapu representatives.

The initial community newsletter in September 2006 looks notably 'thin' in terms of describing progress on the Lake Tarawera Action Plan, the background issues, or possible solutions, costs or benefits for Lake Tarawera. Much of the information is generic to the wider Rotorua lakes. There is also supplementary information presented in relation to Lake Rotokakahi (Green Lake) actions.

Timeliness

The Lake Tarawera Action Plan development commenced with a Working Party meeting on 3 May 2006 (ie, around the same time as the Lake Rotoma Action Plan process began). This was followed by two further meetings during 2006.

According to information subsequently received from EBOP, the Lake Tarawera Action Plan process was put on hold pending availability of adequate staff time and resources to commit to it. With the Lake Rotoma Action Plan now adopted and the Lakes Rotorua and Rotoiti Action Plan essentially finalised, Lake Tarawera is next on the list for completion.

Efficiency

By this stage in the series of Action Plan processes, EBOP staff had access to techniques, information materials and presentations that had been developed and evolved through the previous processes. This set the project off on a good footing and enabled the Working Party to be run effectively. The process's relative efficiency may have also been influenced by the low level of 'manageable' nutrient reduction potential, due to the scale of native bush cover and the fact that 'groundwater' (including influences from other lakes) is the source of 75% of the lakewater.

APPENDIX THREE: OVERVIEW OF LAKE ACTION PLAN DEVELOPMENT OUTPUTS

Lake Okareka

TLI targets

Following public consultation during 2000-2001, the long-term water quality goal for Lake Okareka was set (through Objective 11) at 3.0, compared to a 2005 TLI level of 3.3.

Actions

- 20 tonnes of Phoslock was applied to Lake Okareka in August 2005, August 2006 and March 2007. The aim of this application was to absorb the 30 kg of phosphorus per year that is released (on average) from the lakebed sediments. The 2005 application removed about 20 kg-P. While some initial concerns for fish health were raised after the first application, no negative effects were recorded for the second and third applications. This could be because a coarser Phoslock granule size was used, which spends less time in the water column.
- RDC has completed the wastewater reticulation network design. The plan is to pipe the community's wastewater over the hill to the Rotorua central Wastewater Treatment Plant. Unfortunately this has been held up because the Ministry of Health has no funding available for a 50% subsidy. Rotorua District Council are considering other options for community wastewater treatment.
- Negotiating one-on-one with three landowners in the catchment to reduce nutrient loss through land use changes. The aim is for 200 ha of pastoral land use to change to another land use with low nutrient loss.
- Compilation of a nutrient management toolbox to give advice to landowners on how they can offset their nutrient loss.
- Lake edge plants to remove nitrogen.
- New nutrient discharge rules have been tailored for Lake Okareka. They are currently 'proposed' and will not take effect until fully operative - mid-2008 at the earliest. The rules include:
 - Nutrient reductions to accompany subdivision.
 - Nutrient Management Plans for rural land, including nutrient management practices specific to the property.
 - 2018 deadline for Lake Okareka Catchment Management Action Plan targets to be met, including the land use change target, otherwise compulsory nutrient reductions take effect.
 - Chance for landowners with low nutrient loss to get more land use flexibility if Lake Okareka improves long-term beyond its water quality goal.

Timetable

An indicative timetable for implementation is contained in pages 21 and 22 of the Proposed Action Plan (but is not summarised earlier in the document).

Table 24: Options and indicative timing – Proposed Lake Okareka Action Plan

Option	Timing
Sewerage scheme	3 years
Land use change	3-5 years
Wetlands	3 years
Hypolimnetic discharge and treatment	2 years

Source: Proposed Lake Okareka Action Plan (2003), p. 22.

Costs and benefits

Cost and benefit estimates were initially introduced for the sewerage reticulation option and reported in the August 2003 community update newsletter. Further and more refined cost and benefit estimates were presented in the Proposed Action Plan (December 2003) and discussed at a community Open Day on 25 January 2004.

Evaluation and reporting

The Lake Okareka Action Plan does not make any specific mention of evaluation, reporting or review elements. However, EBOP now produces a standardised set of annual Report Cards for each lake. The Lake Okareka Report Card 2008 provides an update of actions against each of the recommendations from the Action Plan process, as well as providing a current TLI figure and an indication of the trend (ie, 'no change').

Documentation

The hyperlink on the EBOP website to the Action Plan provides a copy of the Draft Working Paper which was published in February 2003. The Draft Working Paper was clearly structured and written, with the audience being key stakeholders and prospective Working Party members.

The Proposed Action Plan was found through a separate search of the EBOP website. This has quite an 'academic' look and feel, with dense text and substantial references to scientific/technical terminology, including planning jargon. There is no succinct summary near the beginning of the document.

The Working Party Minutes were generally well-kept.

Lake Okaro

TLI targets

Following public consultation during 2000-2001, the long-term water quality goal for Lake Okaro was set (through Objective 11) at 5.0, compared to a 2005 TLI level of 5.6.

Actions

- An initial nutrient absorbent cap was applied to the lake bed in September 2007 to minimise nutrient releases. In August 2009, EBOP applied a second layer of nutrient absorbent cap to the lake bed. Monitoring of water quality since the first application has shown a reduction of phosphorus concentrations in the lake bottom waters. This process is aimed at reducing the availability of nutrients for nuisance algae growth.
- Construct a wetland on RDC reserve and adjacent private land to remove nitrogen from the two main streams entering Lake Okaro.
- Complete riparian fencing and planting in conjunction with landowners on all streams in the catchment.
- That EBOP, in conjunction with landowners, investigates the adoption of best management practices to reduce nutrient runoff from pasture and attenuation of high stream flows to enhance wetland performance.
- That EBOP, in conjunction with scientists from the University of Waikato, NIWA and Scion, monitor and assess the ongoing nutrient status of Lake Okaro and the effectiveness of actions to improve lake water quality.

There was also a Lake Okaro-specific review of the section 9.4 rules in the Proposed BOP Regional Water and Land Plan (ie, 'Rule 11' review).

*Timetable**Table 25: Summary of actions and timetable for the Lake Okaro Action Plan*

Action	Responsibility	Expected timeframe
In-lake phosphorus-absorbent cap	EBOP	May 2006 to 2008
Constructed wetland	EBOP/landowners	Apr-Dec 2005
Riparian fencing, planting, restoration	EBOP/landowners	2006 to 2011
Best management practices	EBOP/landowners	Ongoing

Source: *Lake Okaro Action Plan*, p 3.

Costs and benefits

Costs and benefits associated with key actions are specified throughout the Action Plan. Significant costs are summarised near the beginning of the document.

Evaluation and reporting

The Lake Okaro Action Plan does not make any specific mention of evaluation, reporting or review elements. However, EBOP now produces a standardised set of annual Report Cards for each lake. The Lake Okaro Report Card 2008 provides an update of actions against each of the recommendations from the Action Plan process, as well as providing a current TLI figure and an indication of the trend (ie, 'appears to be improving').

Documentation

The Lake Okaro Action Plan may be quite a daunting read for a local community member or other interested stakeholder. It has quite an 'academic' look and feel, with dense text and substantial references to scientific/technical terminology, including planning jargon. However, the six key recommendations from the Action Plan process are succinctly summarised near the beginning of the document.

The Working Party Minutes were generally well-kept, although it was difficult to tell in retrospect from these Minutes as to which Working Party members were representing the local community.

Lake Rotoehu*TLI targets*

Following public consultation during 2000-2001, the long-term water quality goal for Lake Rotoehu was set (through Objective 11) at 3.9, compared to a 2005 TLI level of 4.6.

Actions

- Land use and land management changes on pastoral land to meet a nutrient loss reduction target.
- Implementation of Environmental Programmes to protect waterways.
- Hornwort biomass harvesting.
- Wetland construction.
- Working with a local Maori land trust to investigation phosphorus removal options from a local spring.
- Continuing to investigate other means of nutrient removal.
- Review of Rule 11 requirements for Lake Rotoehu.
- Ongoing promotion of research.

In addition, according to a brief article in the June 2010 issue of the EBOP 'Backyard' newsletter, construction is under way on a phosphorus-locking plant on a stream that drains into Lake Rotoehu.

Timetable

Table 26: Summary of actions and timetable for the Lake Rotoehu Action Plan

Action	Expected timeframe
Constructed wetland/floating wetland	2007 to 2009
Riparian protection and environmental programmes	2006 to 2011
Land use/land management changes	2008 to 2018
Hornwort harvesting	2007 to 2017

Source: Lake Rotoehu Action Plan, p 2.

Costs and benefits

Cost and benefit estimates were introduced and progressively refined throughout the project, including detailed catchment nutrient information and estimated costs and benefits of weed harvesting and other items. Costs and benefits associated with key actions are specified throughout the Action Plan. Significant costs are summarised near the beginning of the document.

Evaluation and reporting

Page 43 of the Action Plan ('Review') states that the Lake Rotoehu Action Plan will be reviewed ten years after its adoption.

The Lake Rotoehu Action Plan does not make any specific mention of evaluation or reporting elements. However, EBOP now produces a standardised set of annual Report Cards for each lake. The Lake Rotoehu Report Card 2008 provides an update of actions against each of the recommendations from the Action Plan process, as well as providing a current TLI figure and an indication of the trend (ie, 'appears unlikely to change').

Documentation

The Lake Rotoehu Action Plan has a similar structure and look-and-feel to the Lake Okaro Action Plan. That is to say, it has an 'academic' look and feel, with dense text and substantial references to scientific/technical terminology, including planning jargon. The ten key recommendations from the Action Plan process are summarised near the beginning of the document.

The Working Party Minutes were generally well-kept, although it was difficult to tell in retrospect from these Minutes as to which Working Party members were representing the local community. This issue was clarified on pages 17-18 of the Action Plan, which lists all Working Party members and who they were representing.

Lakes Rotorua and Rotoiti

TLI targets

Following public consultation during 2000-2001, the long-term water quality goal for Lake Rotorua was set (through Objective 11) at 4.2, compared to a 2005 TLI level of 5.0. The target TLI for Lake Rotoiti was set at 3.5 compared to a 2005 TLI of 4.5. The initial proposed TLI targets for Lakes Rotorua and Rotoiti were peer-reviewed by an expert Technical Advisory Group during 2003/04.

Feedback from EBOP staff suggests that the original nutrient budgets set for Lakes Rotorua and Rotoiti were not as 'aspirational' as originally intended, with the Working Group and related agencies adopting a more 'realistic' approach.

Actions

Lake Rotoiti's water quality problems are mostly because of its link to Lake Rotorua. Table 27 below shows key actions associated with improving Lake Rotorua's water quality, with a lesser number of actions associated with directly improving Lake Rotoiti's water quality.

Table 27: Actions to improve water quality in Lakes Rotorua and Rotoiti

Issues	Actions
Lake Rotorua – Sewage	<ul style="list-style-type: none"> – An \$18.5 million reticulation scheme for eastern lakeside communities (in progress). – Major upgrades to Rotorua City sewage plant (complete). – New rules for high-tech septic tanks in rural areas. – \$70 million to be spent upgrading or adding sewage reticulation around the lakes.
Lake Rotorua – Land Use	<ul style="list-style-type: none"> – Major subsidies and technical support for environmental work that will reduce nutrient output from properties (current). – Rules specific to the Lake Rotorua and Lake Rotoiti catchments to ensure there are no further increases in nutrient losses (under discussion). – Rules to keep stock out of streams and lakes (almost operative). – Development of Best Management Practices for managing nutrients. – NPLAS computer programme available to help land users count the nutrient loss from their property under different scenarios.
Lake Rotorua – Community	<ul style="list-style-type: none"> – Action Plan involvement. – An education resource for schools. – Ongoing media articles and columns, radio talks, and regular updates in local government publications. – Talks to clubs, such as Rotary and Lions. – Primary, intermediate and secondary school education resource (in development). – Up-to-date information and reports online.
Lake Rotorua – In the City	<ul style="list-style-type: none"> – City streets are swept frequently of rubbish and oils so pollutants don't get into Lake Rotorua. – Stormwater is filtered to remove leaves and other rubbish. – New wetlands to filter stormwater for new subdivisions.
Lake Rotoiti	<ul style="list-style-type: none"> – Reticulating sewage in Okawa Bay and Mourea (work near completion). – Reticulation of other Rotoiti settlements within five years. – New rules for high-tech septic tanks. – Rules to keep stock out of waterways (in progress). – Large subsidies for fencing and planting water margins. – Possible treatment of Okawa Bay once the sewage is reticulated.

Source: EBOP website, accessed 1 June 2010.

Timetable

Table 28: Summary of actions and timetable for the Lakes Rotorua and Rotoiti Action Plan.

	Action	Timeframe
Lake Rotorua: Approved actions	Rotorua Wastewater Treatment Plant upgrade	By 2006
	Community wastewater reticulation or OSET upgrade for Rotorua	By 2014
	Stormwater upgrades within Rotorua urban	By 2017
	Tikitere geothermal	By 2009
	P flocculation in the Utuhina stream	By 2006
Lake Rotorua: Potential actions	P flocculation in two other streams	-
	Constructed wetlands	Further evaluation required
	In-lake/in-stream nutrient removal using biomass	Further evaluation required
	Lakebed sediment treatment	By 2011
	Hamurana Stream diversion to the Ohau Channel	After 2011
	Land use management and land use change	By 2017
Lake Rotoiti: Approved actions	Ohau Channel diversion to the Kaituna River	By mid 2008
	Land use diverted by Ohau Channel diversion	-
	Community wastewater reticulation or OSET upgrade for Rotoiti	By 2010
	Land use management and land use change	By 2017
	Treatment of Lake Rotoiti's lakebed sediments	Further evaluation required

Source: Adapted from Table 2 of the Proposed Lakes Rotorua and Rotoiti Action Plan.

Note: An alternative variation of this timeline is tabulated on pages 27-28 of the final Lakes Rotorua and Rotoiti Action Plan (dated July 2009).

Costs and benefits

Cost and benefit estimates were introduced and refined throughout the process. A substantial amount of technical expertise was brought to bear, including input from Prof David Hamilton, RDC engineers and other informants. Cost and benefit information is included throughout the Proposed Lakes Rotorua/Rotoiti Action Plan. Key cost information is also summarised/tabulated early in the Proposed Action Plan (on page 2) and in the Summary of Actions in the final Action Plan (pages 27-28).

Evaluation and reporting

A review timeline is included in page 1 of the Proposed Action Plan. This states that the Action Plan will be reviewed as follows:

- 3 years after adoption – Land use nutrient reduction targets, Sustainable Land Use Implementation Board's progress, Lake Rotorua lakebed treatment, Hamurana Stream diversion, Tikitere geothermal treatment, chemical flocculation.
- 6 years after adoption – The Ohau Channel outflow diversion, land use nutrient reduction targets, Lake Rotoiti's lakebed treatment.
- 10 years after adoption – Land use nutrient reduction achieved against targets, the Sustainable Land Use Implementation Board, and a full Action Plan review.

EBOP now produces a standardised set of annual Report Cards for each lake. The Lake Rotorua Report Card 2008 provides an update of actions against each of the recommendations from the Action Plan process, as well as providing a current TLI figure and an indication of the trend (ie, 'no change to this figure'). The Lake Rotoiti Report Card 2008 provides an update of actions specific to Rotoiti, as well as providing a current TLI figure and an indication of the trend (ie, 'this figure is getting worse').

Documentation

A copy of the proposed or final Lake Rotorua/Rotoiti Action Plan could not be located on the EBOP website. A review of the hardcopy Proposed Action Plan shows it to contain considerable detail about the process, science, options and recommendations. It has an 'academic' look and feel, with dense text and substantial references to scientific/technical terminology, including planning jargon. Chapter 1 of the Proposed Action Plan contains a summary, including full colour landuse and land cover maps, graphs, tables and other summary information. This can be read on a stand-alone basis.

A copy of the final version of the Lake Rotorua/Rotoiti Action Plan (dated July 2009) has been received from EBOP via e-mail. Compared to earlier documents for other lakes, this is more concise and clearly structured. The document is approximately 30 pages, including a 1-2 page Summary of Actions which is tabulated at the back of the Action Plan.

Lake Rotoma

TLI targets

Following public consultation during 2000-2001, the long-term water quality goal for Lake Rotoma was set (through Objective 11) at 2.3, compared to a 2005 TLI level of 2.5.

Actions and Timetable

Table 29: Actions of the Lake Rotoma Action Plan

2009-12 (3 years)	2012-17 (5 years)	2018-27 (10 years)
Action 3: Adopt stewardship approach to farm land management. Action 6: Adopt stewardship approach to forestry management. Action 9: Review and develop regulatory rules.	Action 1: Reticulate along southern shore (2011/12) and upgrade on-site effluent treatment systems (2013). Action 2: RDC review the adequacy of the existing public toilet facilities (2011/12). Action 8: Support research on phosphorus loss via groundwater and subsurface water flows and sample water bodies in catchment for phosphorus levels.	
Action 5: Continue lakeside wetland planting programme and explore enhancements.		
Action 4: Investigate and monitor the use of innovative technologies. Action 7: Investigating alternative land uses.		

Source: EBOP website, accessed 1 June 2010.

Costs and benefits

By this stage of the series of Action Plan development process, much of the science, costs and benefits had been relatively well refined. It was noted at an early Working Party meeting that since Lake Rotoma was not one of the 'degraded' lakes for which Action Plans had been given first priority, only a small share of the Lakes Protection Programme budget would be available.

Cost and benefit information is not particularly clearly summarised in the Action Plan document, but various facts are presented throughout the document.

Evaluation and reporting

The Lake Rotoma Action Plan makes mention of evaluation and reporting at the end of its introductory chapter (s. 1.5.2 Monitoring and Reporting on the Action Plan). This is a general reference to water quality monitoring, and also a heads-up regarding the development of a standardised set of annual Report Cards for each lake. The Lake Rotoma Report Card 2008 provides an update of actions against each of the recommendations from the Action Plan process, as well as providing a current TLI figure and an indication of the trend (ie, 'this figure is steady').

Documentation

The Lake Rotoma Action Plan has a similar structure and look-and-feel to the Lake Okaro and Lake Rotoehu Action Plans. That is to say, it has an 'academic' look and feel, with relatively dense text and substantial references to scientific/technical terminology, including planning jargon. However, compared to earlier documents for other lakes, it is more concise and clearly structured and follows a similar style to the final version of the Lakes Rotorua and Rotoiti Action Plan (July 2009). There is no summary of key recommendations near the beginning of the document, however page 19 of the Action Plan provides a concise table of actions and timelines.

The Working Party Minutes were generally well-kept, although it was difficult to tell in retrospect from these Minutes as to which Working Party members were representing the local community. This issue was clarified in Appendix 5 of the Action Plan, which lists all Working Party members and who they were representing.

