CHAIRPERSON'S REPORT

Great strides have been made since our previous newsletter in December 2009. More than 550 people attended the Public Meeting on the 3rd of January this year, reflecting significant community concern with EBOP proposals at that time for significant potential change in the operational management of the Okere Gates. At that Public Meeting the following mandates were passed to, and subsequently endorsed by, our Association

- *That this meeting of the community of Lake Rotoiti seeks the retention of the Okere Falls control gates and that lake levels shall be controlled in all respects as provided in the existing resource consent number 02 4504 dated the 17th January 1997, and managed as per the operating guidelines relating to that consent;' and*
- *That this meeting requests the executive committee of the Lake Rotoiti Community Association Inc. to represent the community and to conduct negotiations and proceedings as it sees fit.'*

Since then an LRCA subcommittee has persistently advocated for retention of the Status Quo, and negotiated strongly when obliged to consider variations to the existing consents and operational guidelines. We understand that the latest proposal from EBOP will underpin the notified application in mid-July – whilst not conforming to the Status Quo 'in all respects' the LRCA subcommittee anticipates that the current proposal will meet critical parameters, and may well exceed community expectations.

The current proposal remains subject to water quality modeling at Waikato University, and a comprehensive AEE (Assessment of Environmental Effects) Report will accompany the notified consent application. Further advocacy may be required from LRCA for continuing involvement in the future review of guidelines, but **it is highly probable that LRCA will submit strongly in support of the EBOP application**. We urge members and other community groups to carefully consider the notified documentation and submit as appropriate. The submission process is not just about points on which you may be at variance with the proposal – it is also **critical to express support where that is deserved**.

Despite the fact that effective consultation with all stakeholders was slow in coming during the previous year, recent months have been extremely productive with all the major parties (EBOP, RDC, Te Arawa Lakes Trust, Ngati Pikiao, LRCA and other community groups) coming to the table. Concerns were shared and solutions negotiated for those issues that could be addressed within the parameters of the proposed Consent, with acknowledgement for other concerns which may require consideration outside this consent process. Negotiations were conducted with empathy and in very good spirit – commonsense and pragmatism has prevailed.

The following pages outline the current proposed Consent Renewal soon to be lodged by Environment Bay of Plenty (EBOP). We are very aware that interpretation of charts and graphs may be difficult for some; if the graphs on the following pages appear complicated, we hope that the one on this page will help to clarify. You may wonder why the Statutory Range no longer appears on the EBOP Proposed Regime below. That is because the legislation behind a Statutory Range is no longer applicable. In layman's terms what the Proposed Consent contains is an Operational Range of 200 mm (8 inches) with an allowance above and below that for 'natural spikes', such as excessive rainfall or drought as we experienced in the late summer this year.

Why the wider Operational Range? Ecological implications have been an important consideration, but since the last Consent was put in place in 1997, there have also been many changes to our lake environment. The most important is a realisation that Lake Rotorua is substantially polluted and its outflow is to our lake. Over the last decade we have seen substantial algal blooms affect many parts of Lake Rotoiti and severely threaten water quality. The completion of the diversion wall from the Ohau Channel delta and down part of the Okere Arm, with sewage reticulation in Okawa Bay and other initiatives, saw dramatic improvements in the health of our lake. However, all good things come at a price. The Ohau Channel is silting up, and the Okere Arm is bearing the brunt of the outflow waters from Lake Rotorua. We need to address these problems and try and help those who live in these areas. The wider Operational Range will give EBOP an improved facility to build storage volume during the summer months when the lake has its highest recreational usage, and then to 'flush' these areas during the early winter.

We are part of a large community, often with diverse aspirations and needs. The proposed Consent application, we believe, is an extremely sensible and rational compromise designed to satisfy the vast majority of us who live around, benefit from, and play on Lake Rotoiti.

WHAT NEXT?

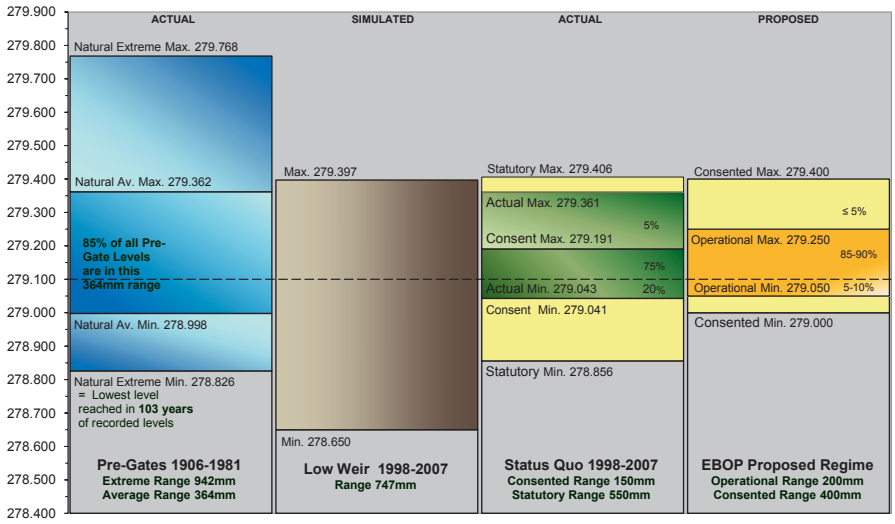
We want to contact as many people as possible in a very short time frame, once the Consent is lodged. Why? We believe we should hold another **Public Meeting** to determine community response to the proposal. We want to make a submission in support of the Consent; we understand that Te Arawa and Ngati Pikiao are now also inclined to support this proposal. The more supporting submissions that are received, the more likely it is that the Consent will be heard by Commissioners and not in the Environment Court (a much more realistic and far less protracted and expensive option). Please check your covering letter and if we do not have your correct email address (or at all!) could you send this to us at lrca@xtra.co.nz together with full name and other contact details.

REGIONAL SPECIAL PROJECTS COMMITTEE

The article from the Chair of LakesWater Quality Society contains excellent news of a substantially revised timetable for reduction of 311 tonnes of Nitrogen from the Lake Rotorua catchment. We commend the work of EBOP's Special Projects Committee in this regard; an enormous amount has been achieved and the challenge now is to ensure that all parties concerned remain focused on this very real problem and doggedly commit to an effective implementation programme.

HILARY PRIOR | CHAIRPERSON

UPDATED PROPOSAL FOR LAKE ROTOITI LEVELS



OKERE GATES CONSENT RENEWAL

(Acknowledgement: Content for this article has been provided by Ken Tarboton - Group Manager Rivers and Drainage, EBOP.)

BACKGROUND

Lake Rotorua levels are controlled by outflow through the Ohau Weir, down the Ohau Channel and into Lake Rotoiti. Levels in Lake Rotoiti are controlled by the operation of the Okere radial gates. Environment Bay of Plenty owns both the Ohau Weir and Okere Gates structures which are currently part of the Kaituna Catchment Control Scheme. The structures are operated by the Rivers and Drainage Group who hold the consents for their operation. The Consents for both structures expire in June 2010. In order to keep operating the structures, an application to renew the consents was filed before the end of 2009.

Since issue of the current consents in 1996, Te Arawa Lakes Trust (TALT) has become the owner of the beds of 13 lakes in the Rotorua area under the Deed of Settlement of the Te Arawa Lakes Historical Claims and Remaining Annuity Claims 2004 and Te Arawa Lakes Settlement Act 2006. This ownership includes the beds of Lake Rotorua and Lake Rotoiti but not specifically the land under the Okere Gates and Ohau Weir structures. The Act requires Environment Bay of Plenty to engage with and involve Te Arawa through the TALT on Rotorua Lakes issues.

PROCESS TO DEVELOP PROPOSED OPERATIONS

The process has been divided into three stages.

Stage 1

In stage 1 Te Arawa were involved to develop a process for the consent renewal and assist in determining an initial consent application to be filed by the end of December 2009. Some consultation with other stakeholders and interested parties occurred during this stage. Stage 1 ended with filing the consent application at the end of December 2009.

Stage 2

Stage 2 has involved further consultation and water quality modelling to refine the initial placeholder operational range for Lake Rotoiti to determine a proposed operational strategy. The Assessment of Environmental Effects (AEE) is currently being revised to be used in the notification of the consents by July 2010.

Stage 3

Stage 3 commences with notification of the consent and will include receiving submissions, a commissioner or Environment Court hearing and deliberations ending with a consent decision. Based on submissions the applicant may request direct referral of the final consent application to the Environment Court. It is anticipated that Stage 3 will be completed before the end of 2010.

PROPOSED OPERATIONAL STRATEGIES

Lake Rotorua

Lake Rotorua levels, controlled by the Ohau Weir structure, have a relatively natural fluctuation within the currently consented range of 610 mm between 279.50 and 280.11 m (RL Moturiki Datum). Operations consist of the removal and re-insertion of stoplogs in the weir structure allowing some level control. For the most part levels fluctuate naturally with the stoplogs only removed occasionally – typically once or twice a year during extreme rainfall events.

Trigger levels determine when the stoplogs are removed or reinserted. Consultation has indicated that in general lake users and the lakeside community are satisfied with the current control structure and lake levels. Considerable infrastructural investment has been made on and around the Lake Rotorua foreshore by Rotorua District Council and private enterprise based on the current Lake Rotorua operational strategy.

As a result, no operational or structural changes were considered for the Ohau Weir and Lake Rotorua operations. Modelling of a range of possible structural configurations and operations for the Okere Gates have indicated that there is very little effect on Lake Rotorua for changes made to Lake Rotoiti levels.

The proposed operational strategy for Lake Rotorua is to maintain lake levels between the current upper and lower statutory levels. Some flexibility of the guidelines for installation and removal of the stoplogs will be sought, to allow for adaptive management and more flexibility in maintaining downstream Lake Rotoiti levels without significantly impacting Lake Rotorua levels.

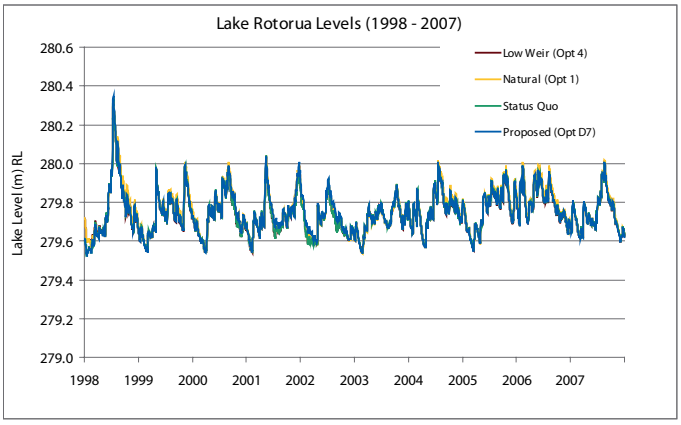


Figure 1. Comparison of Lake Rotorua levels for different operational options at Okere Gates

LAKE ROTOITI

Options considered

As part of the work to identify the proposed operations for the Okere Gates a number of options have been considered, modelled and discussed with the community. The following four options were identified as representing the wide spectrum of options considered. A consistent 10 year period from 1998 to 2007 with the same measured rainfall and inflows to both Lake Rotorua and Rotoiti was used in the different model simulations.

- Status Quo. Measured Rotoiti levels resulting from current consented operations.
- Low Weir. Simulated Rotoiti levels with the Okere gates left completely open or removed without restoring the original rock ledge (removed during construction).
- Natural Levels. Simulated Rotoiti levels with the pre-structure Rotoiti outlet morphology (rock ledge reinstated) and the current 10 year rainfall and inflow.
- Proposed Operations. Model simulated operations to best meet the varied community goals for Rotoiti levels.

The ranges for the different options are compared in figure 2 below.

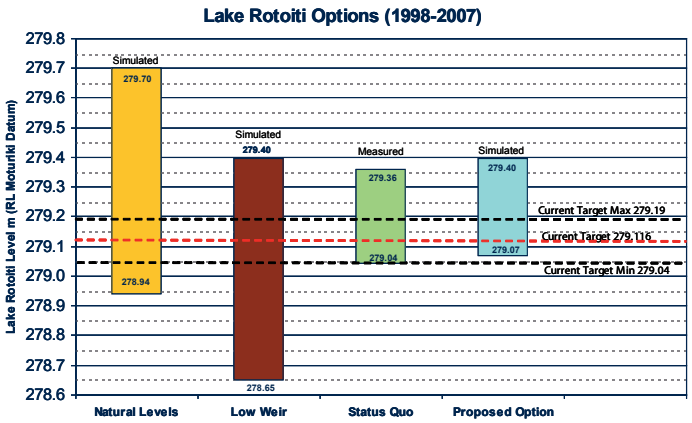


Figure 2: Comparison of simulated ranges for different Lake Rotoiti operational options compared with measured data from 1998 – 2007.

Option Comparison Criteria

To maximise benefits to the wider community, indicators that considered cultural, environmental, social and economic well beings were identified using the Mauri model. Performance measures were derived from these indicators to quantify differences between options. A simplified subset of the performance measures (described in previous reports) was used together with best professional judgement to select the proposed option.

Recent consultation

Several options were presented at the 9 and 11 April Public Open days held in Rotorua. In general there was support for a wider operational range than the status quo, however concerns were expressed about lower than current target Lake Rotoiti levels proposed, particularly in the summer months. As a result of these concerns further modelling and consultation was undertaken to best address the community concerns. The table below shows the extent of the consultation undertaken since the April open days. The object of this consultation was to further refine the proposed operations with more modelling, result assessment and discussion of the results with a cross-section of community representatives.

Table 1. Community and agency consultation and briefings since April 2010.

Date	Consultation or Briefing
9 and 11 April	Two Public Open days, Lynmore Primary School, Rotorua
19 April	Te Arawa Lakes Trust Briefing, Rotorua
26 April	Rotorua District Council, Te Arawa Lakes Standing Committee, Rotorua
5 May	EBOP Regional Monitoring and Operations Committee, Whakatane
6 May	EBOP Maori Committee, Mataikotare Marae, Rotokawa
6 May	RDC technical staff, Rotorua
7 May	CEO's of RDC, EBOP, TALT with TALT Chairman, Rotorua
11 May	Tapuika Iwi, Te Puke
11 and 18 May	Optimising workshops with Lake Rotoiti Community Association (LRCA) representative, Whakatane
19 May	TALT, EBOP and LRCA, Rotorua
26 May	Kaituna Catchment Control Scheme, Te Puke

PROPOSED OPTION

Through the above consultation and modelling efforts, the proposed option has been refined. The range of the proposed option is shown in figure 2 and daily Lake Rotoiti levels over the 10 year period (1989-2007) for each option shown in figure 3 (below). The proposed option has a slightly wider and more natural range than the status quo. The proposed option does not have the variability of low weir or natural levels option but better meets other performance criteria.

Key benefits of the proposed option are as follows:

- More natural range (with target range rather than fixed target level) with associated cultural and environmental benefits
- Potentially better water quality in Lake Rotoiti and down the Kaituna River
- Jetties and navigation unaffected by level range
- Fewer flows greater 40 cumecs down Kaituna River thus reduced erosion and flood risk
- Slight improvement in number of raftable days

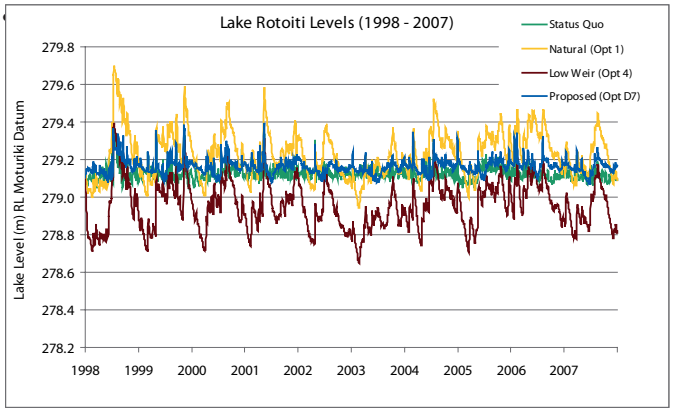


Figure 3. Daily Lake Rotoiti levels over 10 years with different operational options

PROPOSED OPERATIONAL STRATEGY

Based on the proposed option, the operational strategy for Lake Rotoiti controlled by the Okere Gates is proposed as follows:

Principle: Improve environmental and cultural outcomes while not adversely affecting social and economic values. This is achieved by allowing for seasonal fluctuation within specified target ranges. This differs from the current consented operations which have a static target level with tight variance around the target level

Proposed Consented Levels and Ranges (all levels in m RL Moturiki Datum)

- Maximum consented level of 279.40
- Minimum consented level of 279.00
- 400 mm consented range

  (Note that 90% of the simulated Natural Levels are between the proposed maximum and minimum)

  Proposed operational levels and ranges (all levels in m RL Moturiki Datum)
- Allow operational levels to rise above 279.25 for a maximum of 5% of each year in extreme events
- Target operational range of 200 mm between 279.05 and 279.25 with following target distribution

- 5 -10% of year between 279.20 and 279.25
- At least 80% of year between 279.10 and 279.20
- 5 -10% of year between 279.05 and 279.10 in the months of May to July

REVIEW AND ADAPTIVE MANAGEMENT

It is proposed that a regular (every three years) review of this operational strategy is undertaken to allow adaptive management within the above targets.

Adaptive management within the operational flexibility of these targets could include initiatives such as rapid drawdown (flushing) to provide short term benefits for water quality if requested and approved by the Te Arawa Rotorua Lakes programme.

A schematic of the proposed operational strategy compared with the current operational strategy is shown in figure 4 below.

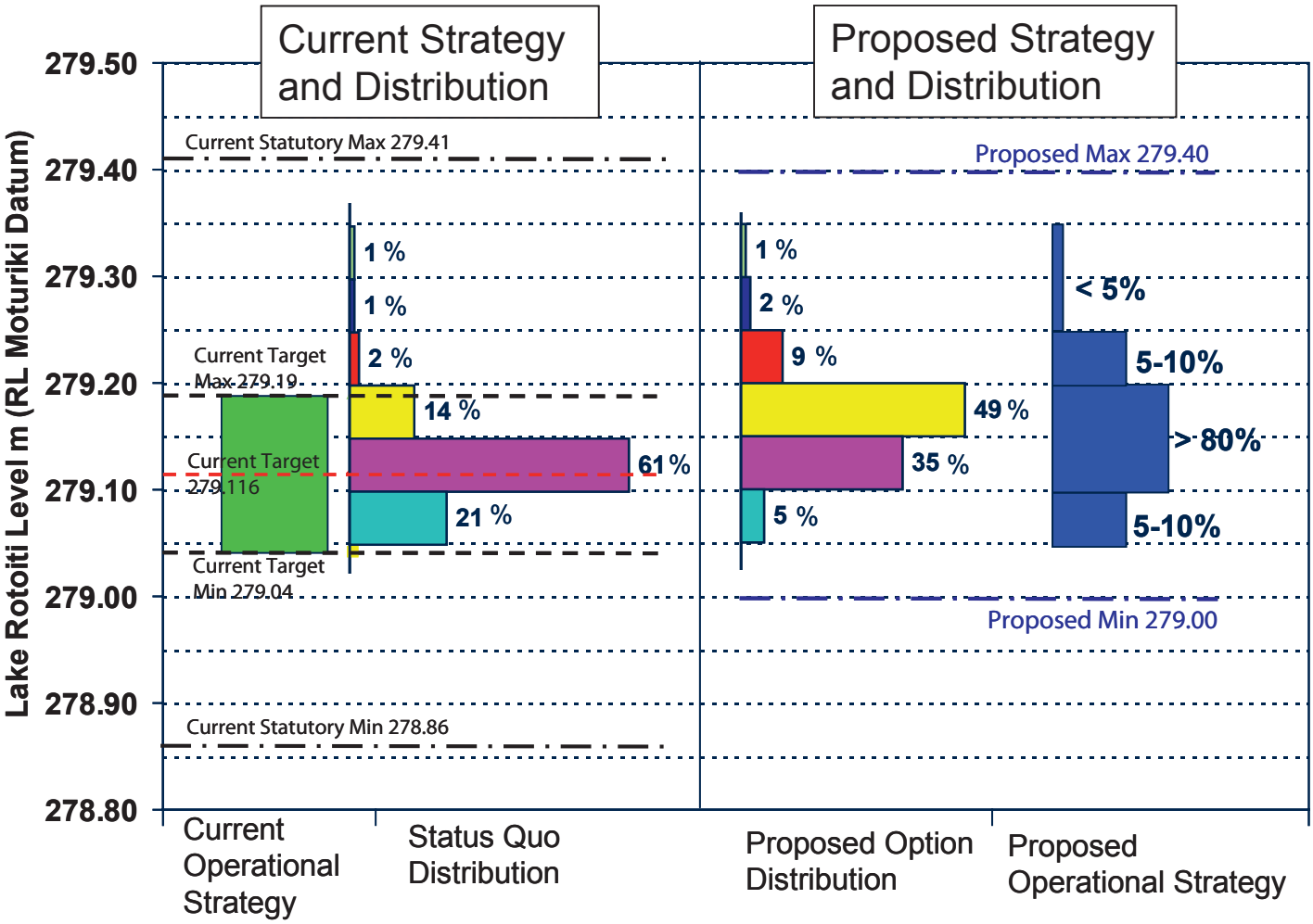


Figure 4. Comparison of current operational strategy and distribution with proposed option distribution and proposed operational strategy.

NEXT STEPS

Water quality modelling is currently underway to confirm the preferred option. A revised AEE will be produced using the preferred option and updated water quality modelling. It is proposed that the revised consent application will be lodged and notified in July 2010.

Following lodgement of the consent, it will be notified, public submissions received, reviewed and responded to and then the consent will be heard either by Commissioners or the Environment Court.