Meeting M	linutes	Lake Tarawera Working Party		
Venue		BOPRC Office, Arawa Street, Rotorua		
Date and Time		18 February 2015 5.30-7.30pm		
Chair		Andy Bruere		
Apologies		Terry Beckett, Hariata Ngatai, Colin Maunder, Clr Neil Oppatt, Clr Dave Donaldson, John Ford, and John Hura		
Present	Libby Fletcher Ann McSween Geoff Palmer Leilani Ngawh Bangitihi Pape	Lakes Community Board ka Te Arawa Lakes Trust		

Rangitihi Pene	Tuhourangi Tribal Authority
Chris Clarke	Te Mana o Ngati Rangitihi Trust
David Hamilton	University of Waikato
Trish Fordyce	Timberlands Ltd
Grant Keeling	Farmer
Murray Travers	Farmer
Matt Osborne	Eastern Region Fish and Game
Greg Manzano	Rotorua Lakes Council
Paulina Wilhelm	Rotorua Lakes Council Programme Leader Strategy
Andy Bruere	BOPRC
Karen Parcell	Lakes Operations Manager
Gemma Moleta	BOPRC Sen Policy Analyst (Nat Res Policy)
Andy Woolhouse	BOPRC Policy Analyst (Water Policy)
	EMTS Ltd for Bay of Plenty Regional Council

Purpose

To assist with the development of the Tarawera Lakes Restoration Plan (the Restoration Plan) to achieve long-term water quality target. Copies of the draft plan and terms of reference for the group were provided (copies also attached).

Election of Chair

Geoff Palmer raise the question of election of the chairperson. It was agreed that an election will take place at the next meeting and that Andy Bruere will continue in the chair for today

Action Point - Nominations for Chair to be emailed to BOPRC before the next meeting so that the election can be completed quickly at the start of the meeting and the elected person can chair the meeting.

Terms of Reference - Andy Bruere

Andy Bruere went through the Draft Terms of Reference document for the Tarawera Lakes Working Group (copy attached). It was agreed that Terms of Reference may be amended as the group works develops.

Geoff Palmer -Noted there was no reference to water reticulation.

Andy Bruere - The focus of this working party is lake water quality and the Restoration Plan. Water reticulation is outside the scope of this group. However the comment is noted and the group may choose to have a parallel working party looking at water reticulation. As discussion progresses on sewage treatment there may be some synergies with the water reticulation discussion.

Background Presentation - Karen Parcell

Karen presented main points from the Restoration Plan. The document has not been publically notified but it is likely to go out for public submissions within the next 2-3 weeks.

Libby FletcherHow will non residents be aware of the document and process?Karen ParcellFrom the Community AssociationGeoff PalmerAsked if a hard copy could be distributed to all residents?It was agreed that it isn't necessary to deliver a hard copy of the plan, but a letter with web links to
plan should be sent to each house. This will require letter from LTRA sent to RLC for them to
distribute.

Action Point s Libby Fletcher to draft letter and arrange delivery via RLC Karen Parcell to inform Libby when advert will appear in newspaper.

Professor David Hamilton Presentation

Professor Hamilton presented scientific data collected from the Tarawera catchments and showed the relationship between nutrient inputs (phosphorus [P] and nitrogen[N]) and lake water quality. Algal growth depends on the balance between the two nutrients. In Lake Tarawera N levels are low and P levels are high. Blue green algae (cyanobacteria) have the ability to fix nitrogen and can float hence they affect clarity and can move around the lake. This means that control methods need to focus on P rather than N. Levels of P in all streams are generally elevated, but geothermal streams contain greater P concentrations.

Lake Tarawera receives surface and/or ground water from seven other lakes (Okatina, Okareka, Tikitapu, Rotokakahi, Rotomahana, Okaro, Rerewhakaaitu. These are called the 'outer catchment'. Activities in these individual catchments affect water quality in those lakes as well as Tarawera. Each of the seven lakes acts like a sponge Its estimated that 70% of the P is retained in each lake, meaning that 30% contributes to Lake Tarawera P loading. This also means that actions in the outer catchments are only 30% as effective as actions in

the inner Tarawera catchment. Many of the outer catchment lakes also have restoration plans and measure in place.

Discussion

If geothermal inputs can't be controlled. Is landuse the only way to address nutrient inputs?

Andy B That's a question for the WP to work though

There was discussion about how population numbers were calculated and the difficulty in accurately estimating summer populations with so many holiday homes and batches. Geoff Palmer said based on recycling activity the resident population of 400 is thought to increase to 2000 for the main two month summer period. Also more events at Tikitapu will add to the problem.

Currently there are no nutrient caps within the catchments. It is proposed to have voluntary agreements (farm nutrient plans) with likely support of capping rules, otherwise positive actions could be negated by changes in landuse that increase nutrient inputs.

Rangitihi Karen	Iwi values are not considered in the draft plan Many of the values are the same, but it is acknowledged that there are also
Karen	some differences.
Leilani	TALT are working thro a series of Hui (began last week, 40 attendees) to establish a Cultural values framework. Will look at ways to translate values to actions on the ground.
David	Supports the use of cultural health indices. Decline in native species often equates to reduction in water quality.

Actions and Agenda for Next Meeting

Group to review to Draft Tarawera Lakes Restoration Plan and consider;

- Nominations for chair to be sent to Andy Bruere at BOPRC (cc'd to Gloria.Zamora@envbop.govt.nz) prior to the meeting
- Election of Chairperson at the start of the meeting to take effect immediately
- Libby to send letter to all households in Tarawera via RLC mail distribution system advising of the draft plan, formation of the working party and meeting details
- LTRA to decide if the Tarawera Lakes Restoration Working Party should undertaken the role (either directly or as an umbrella group) of the Lake Tarawera Waste Water Working Party as proposed in the letter from LTRA to Mayor Steve Chadwick on 10 February 15.
- Discuss proposed key actions
- Discuss Possible Sewage Options
- Further Questions

Next Meeting Wednesday 18th March 5.30 - 7.30pm

NB Andy B and Andy W wont be here