

Lakes Water Quality Society Inc Website: lakeswaterquality.co.nz PO Box 7023, Te Ngae, 3042 Rotorua Email: secretary@lakeswaterquality.co.nz Chairman: Don Atkinson 07 362 4644

Treasurer: Marcel van Leeuwen
Secretary: Nic Roxburgh

Minutes of the Annual General Meeting held at Pikiao Rugby League Club Rooms, Mourea, at 10.00 am on Monday 30 January 2017

Karakia:

Welcome: The Chair welcomed everyone and acknowledged the organisations that are very relevant to the LakesWater Quality Society: Hon Todd McClay (MP for Rotorua), Mayor Steve Chadwick, Chairman Doug Leeder, Crs Lyall Thurston, Dave Donaldson, Mark Gould, Rob Kent, Norm Brunning, Karen Hunt, Phill Thomass, Jim Stanton (Rotorua Lakes Community Board), Hilary Prior, Su Cammell (Community Association Chairs), Andy Bruere, Greg Corbett (Council Staff), Prof David Hamilton (Waikato University), Willy Emery (Rotorua Te Arawa Lakes Trust), Te Taru White (Incentives Board), Ian McLean, Nick and Elizabeth Miller, Warren Webber (Life Members) and about 70 members and friends.

Apologies: John and Anne Green, Simon Upton, Robyn Bridgman, Arapeta Tahina, Grant and Pam O'Donnell, John Gifford

Minutes of Previous Meeting: It was moved that the minutes were a true and fair record of the meeting. *Margariet Theron / Jim Stanton*

Chairman's Annual Report:

The Chairman began by noting that this was the 55th report so our society has some heritage. He noted that Rotorua is in some areas leading New Zealand's GDP growth and stressed how important the quality of our lakes is in enabling this. Reflecting on his first year at the helm:

- The emergence of Catfish in Lake Rotoiti in March 2016 is a serious concern noting that catfish are already established in Lake Taupō in plague proportions. The western end of Lake Rotoiti and Lake Rotorua have numerous shallow bays which are ideal for the catfish. They use their feelers to stir up sediment, which would cause long term harm. He thanked BOPRC for their strong focus on eradication.
- Endothal consent is making progress, albeit slow. Aquatic weeds plans are pivotal to
 restoring our native flora and fauna. The report includes the first release of the SPI Index
 reporting the quality of native plants with Okareka the best at 36%, but our most populous
 lakes (Tarawera and Rotoiti) are at 80-90% invasive weeds, much like gorse.
- Sewerage schemes are progressing.
- Tarawera Restoration Plan is in train, but it is important that the money is spent on all the lakes in the Tarawera system.
- The TLIs were provided in the report showing that there is still a lot of work remaining and significant expenditure required.
- Don expressed the Society's thanks to retiring members John Green and Jim Howland

It was moved that the Chairman's Report be accepted. Don Atkinson/Warren Webber

Matters arising from the Report: None

Financial Report:

The Treasurer, Marcel van Leeuwen, presented his report commenting that there had been little activity and that the Society's position was stable and generally in good health.

It was moved that the financial report for the LakesWater Quality Society Inc. for the year ending 30 September 2016 be received and approved. *Marcel van Leeuwen/Geoff Rice*

It was moved that Stefan Bennett be appointed as auditor for the next financial year. *Marcel van Leeuwen/Elizabeth Miller*

Election of Officers and Executive Committee:

As the current chair, Don stood down. Ian McLean called for nomination and then reconfirmed Don Atkinson as ongoing Chair, and congratulated and thanked him for his work.

Chair	Don Atkinson	(Rotoiti)	Liz Miller/Bob Armstrong

Don returned to the chair and continued to run the meeting.

Treasurer	Marcel van Leeuwen	(Okareka)	Don Atkinson/Jim Howland
Secretary	Nic Roxburgh	(Rotoiti)	Confirmed by acclamation
Committee	Warren Webber	(Rotoiti)	и
	Libby Fletcher	(Tarawera, LRTA)	и
	Neil Callahan	(Tarawera)	и
	Stewart Edward	(Rotorua)	и
	Tai Eru	(Rotorua)	и
	John Gifford	(Rotorua)	и
	Geoff Rice	(Lower Maketu, Tapu- ika lwi Authority)	u
	Su Cammell	(Rotoma, Rate Payers)	и



Sandra Goodwin	(Okareka)	и
Hilary Prior	(Rotoiti, LRCA)	и
Phill Thomass	(Chair Community Board)	и
Ken Kennedy	(Rotokawa)	Tai Eru/Geoff Rice

The Chair said it is a privilege and reiterated his thanks to retiring members.

General Business

Lake Levels: Mary Stanton emphasised the importance of lake levels and the need to protect them, and to recognise the impact of fluctuating levels, suggesting that there needs to be a focus on achieving levels that are on balance best for all interested parties, to look after beaches, satisfy boat users, and to sustain Kaituna flows.

Andy Bruere noted that work is progressing on the Cultural Management Plan, and this will consider what reviews may be necessary across a range of matters, including lake levels. He also said that they continued to focus on the importance of filtering storm waters. Finally, he thanked Steve Chadwick for her support.

Te Taru White Program Director of the Incentive Program outlined success in reducing nitrogen into Lake Rotorua on several fronts and indicated a number of contracts in the pipeline. The good news is that they were on target to remove 100T of Nitrogen out of the lake. Acknowledged the new chair, Norm Brunning, and the committee.

Todd McLay offered his congratulations to Don for his first year and his re-election. He also thanked John Green and noted that it was pleasing to see such a smooth transition after such a strong leader. It is very important that LWQS keeps an eye over all things that impact water quality, given it plays such an important role in our regional tourism.

Todd reminded us that we have to push on and progress the sewerage improvements and that further funding won't be available. He reiterated that our Rotorua lifestyle is an advantage in this period of positive economic activity, and that sometimes we have to make tough decisions to sustain this. He again expressed his gratitude for Don's ongoing work and focus, committing to continue collectively supporting our work together. Don replied, with his thanks for supporting the Society.

Doug Leeder spoke about the key issues that BOPRC are focussed on:

• Lake Rotoiti wall remediation plan is in place, and there is ongoing work to eradicate catfish.



- Kaituna River: he noted the lessons from Louise Judd's death and the challenges to try and clear that difficult section of the river.
- Sewerage improvements are a priority.
- Plan change 10 hearings are in March, with an independent adjudicator: Judge Whiting.
- Tarawera reticulation of sewerage is the biggest issue. Seeking input commensurate with funding designed for the lesser populated communities such as Rotoma.
- Water quality and quantity are still the biggest issue, with focus extending to urban contribution as well as rural.
 - 1. Focus on waste water and the risk of sewerage overflows entering waterways.
 - 2. Stormwater management, e.g. Tauranga new developments include good mitigations ratepayer vs taxpayer.

Tai Eru asked Doug what communication channels are in place to advise residents and visitors when there are closures or other impacts to community access, citing the January drowning and recovery causing the Otaramarae access to Lake Rotoiti to be closed without notice. Suggestion is that Te Arawa Lakes Authority should have that responsibility, although this isn't currently picked up by any authority.

Tai also recommended that the consultation for clearing the Kaituna should include Ngati Pikiao, and he also mentioned the inflows to the lake impacted by the dump and the mill. Doug advised that consultation is in progress with a renewed focus with kayakers.

Don thanked Doug for their ongoing work and welcomed Mayor Steve Chadwick and invited her to speak.

Steve Chadwick:

- Tabled a special book on Te Arawa with thanks to John Green
- Welcomed Norm Brunning as chair of the Incentive Programme.
- Assured the meeting of RLC's and her support for East Rotoiti and Rotoma Sewerage work, noting that piping design work is underway and a biolitics trial will then start – it is moving ahead.
- Recommended that she, Todd McClay and Scion progress funding for a Centre of Water Excellence following an initial meeting with Professor David Hamilton, RLC and BOPRC.
- Mentioned that it would be great to have LWQS present to the Speakers forum.
- Noted the synergy between RLC, Regional Council and Rural Community Boards, and mentioned that we have seen a 1.9% increase in our population.
- Concluded by reflecting that water is to be New Zealand's biggest issue this year and that it
 is great to have ongoing advocacy from LWQS and Ian McLean for Rotoma East Rotoiti
 Sewerage.

Don announced that LWQS plan to conduct a Symposium either late July or early August, to consider lessons and future directions, understanding the littoral zone, and the importance of pushing ahead on the Tarawera Restoration Plan.



Don invited Greg Corbett, BOPRC Biosecurity Manager, to take the floor to provide an update on Endothall Resource Consent and on the eradication of catfish following their discovery in Lake Rotoiti, March 2016.

Greg spoke about the proposed use of Endothall on our lake weeds. He reflected that Biodiversity has been a key focus, following the 2015 LWQS Weed and Wallaby Symposium, culminating in the Lakeweed Submissions on the 10 Year Plan and money set aside for amenity weed control. The Symposium Findings recommended a strategic and co-ordinated approach leading to Lake Weed Management Plans, and to obtaining Resource Consent to use Endothall as weed control. These are accepted and work continues on the Lake Weed Management Plans, jointly with LINZ, and with assistance from Boffa Miskell.

He advised that work on the Lake Weed Management Plans has started with Lake Rotoiti, as it serves a useful complex model. Plans for the other lakes will progress later in the year. Greg referred us to the information that Rohan Wells provided on Endothall at last year's AGM, reiterating that it has negligible impact on our native lake plants. Consultation is in progress and he mentioned the lack of support for the weed harvester while the weed presence raises health and safety issues. He mentioned that although there have been some concerns raised through consultation there is overriding strong support to proceed. He reminded us that there is already 45 years of worldwide experience using Endothall. Following consultation, assuming consent is granted, Council still have to submit the EPA Application.

Greg also provided an update on the catfish incursion in Lake Rotoiti and outlined a brief history of catfish sightings in or around Lake Rotoiti, starting in 1993 when a live catfish was spotted falling off a boat trailer that had travelled from Lake Taupo. In 2004, NIWA found evidence of catfish in Te Weta Bay. In 2009 a large dead catfish washed up in Okawa Bay, which was sent away for analysis which confirmed that it wasn't from Taupo, but its origins were unknown. In 2015 a dead catfish was found floating at the hotpools, but all reports of this discovery were lost. Most recently, March 2016, the Weed Harvester threw up 2 catfish in 30 minutes. Subsequent netting discovered 800 catfish, predominantly in Te Weta Bay.

Eradication is the goal, and a cordon around Te Weta Bay is being proposed, there have been small numbers of catfish found outside this area. They are considering DNA and isotope analysis; a study on the potential impacts to Lake Rotoiti; and use of acoustic tagging to better understand where and when to target capture.

Greg was asked:

- What have been the effects of netting on Dab Chicks, to which he replied that there were a small number of fatalities, but some net modifications have been undertaken and time of setting has changed, this has reduced the bycatch.
- Does Endothall pose a risk to the Dab Chick population and other water fowl, to which he



advised that there are no known impacts, but they limit spraying times so that they don't interfere with the breeding season.

Don then invited Professor David Hamilton to take the floor.

Professor Hamilton reflected on the work to improve lake water quality, while he has been involved, as he prepares to depart NZ to take up a position in Australia.

The Ohau Channel wall was put up in 2008. While improvements in water quality started in 2006 & 2007 as a result of Alum dosing, the wall has unquestionably made a definitive improvement in water quality.

Rotoehu challenges are less clear, as it hasn't responded materially to alum dosing, nor to changes in farm management practices.

Okareka has improved and the wetlands appear to be working well.

Tarawera – alum dosing is an ongoing challenge due to highly enriched sediments and gradual loss of dissolved oxygen in debris in lake bed. We still need a better understanding of why the waters are deteriorating.

Tikitapu (Blue Lake) has intense recreational use. Silica plays a critical role, but geochemical understanding is required.

Rerewhakaaitu, the perched lake, is interesting as above ground water represents 20% of its catchment. Science monitoring buoys provided real insights into colour, clarity and water quality.

TLI is just one measure, but it isn't providing all the insights we would like, given water with a 10 years resident in the lake has 25 year response time. Yearly TLI measurements are not specific. Other considerations are: Changes in water levels; Managing as integrated catchments; Health of environment (e.g. forest); Lake SPI: weed invasion; Boat transfers; Possum and gorse. All impact our lakes

He suggested that it is a big challenge for the National Policy Statement to incorporate IWI and cultural values. We live a more complex life with more consultation and more checks and balances.

But we are still moving forward relatively unimpeded thanks to the hard work from some key individuals. Fortunately, he noted, councillors are putting aside personal agendas. LWQS Rule 11 is extremely important: every policy now takes 10+ years to achieve.

He went on to thank some key individuals and to the tribes and lwi, noting that he enjoyed being challenged. He voiced his concern that science needs to continue to be at the core.

Don called upon Ian McLean to thank Prof David Hamilton on behalf of LWQS.



The Lakes Water Quality Society deeply regrets the resignation of Professor David Hamilton from the BOP Regional Council chair in Lake Restoration and Management. We record the magnificent work he has done for Rotorua Lakes, for the New Zealand environment, for lake science internationally, and in teaching, as well for the University of Waikato. We thank David for the difference that he has made for our world, and wish him well in the future.

Don thanked the kitchen staff for their support and hard work (Dianne Atkinson, Jude Webber, Elizabeth Hoogveld and Kaye Lillico). He also thanked Leo Meharry and Willie Emery for their early start and commitment to the pork lunch.

Phill Thomass advised that there were upcoming Community Board public meetings regarding SH33 Road Safety, as well as a workshop to discuss:

- Green waste at the Transfer Station;
- Freedom camping solutions;
- Long Term Plan input;
- Spatial review.

The meeting closed at 12.00 midday.

