

Lakes Water Quality Society Incorporated

Minutes of the Annual General Meeting held at Pikiaro Rugby League Club Rooms, Mourea, at 10.00 am on Monday 28th January 2019

Karakia: The meeting was opened with a karakia given by Dr Ken Kennedy.

The Chair cited the death this year of Tai Eru Morehu and acknowledged all the valuable work he had done over the years in collaboration with LWQS and the Rotorua lakes community.

Welcome: The Chair welcomed everyone and acknowledged the attendees from the organisations that are relevant to the Lakes Water Quality Society: Mayor Steve Chadwick, BOPRC Chairman Doug Leeder, Cr. Lyall Thurston, Dave Donaldson, Trevor Maxwell, Kevin Winters, Mark Gould, Sir Toby Curtis, Phill Thomass, Jim Stanton (Rotorua Lakes Community Board), Professor Brendan Hicks (University of Waikato), Nicky Douglas (Te Arawa Lakes Trust), Nick and Elizabeth Miller and Warren Webber (Life Members) and about 70 attendees in total.

Apologies: Ian McLean, John and Ann Green, David Hamilton, Fiona McTavish, Tamati Coffey, Karen Hunt, Fletcher Tabuteau, Terry Beckett, Grant & Jill Cossey, Andy Bruere, Don Stotter, Hilary Prior, Brentleigh Bond, Faye Stamp, Hon. Paul East. *Accepted.*

Minutes of the Previous Meeting: It was moved that the minutes were a true and fair record of the meeting. *Bob Armstrong/Warren Webber*

Chairman's Annual Report

The Chair highlighted some big issues that the lakes are facing now:

Congratulations to the Rotorua Lakes Council (RLC) for getting a lot of work done in relationship to the Eastern Rotoiti sewerage scheme.

Bay of Plenty Regional Council (BOPRC) have been doing an enormous amount of work and congratulations to them. But there are also some questions to answer and there is still a long way to go. The Rotorua catchment is dealing with a big nutrient issue with a very stretched budget. There are significant issues and challenges around the purchasing of 100 tonnes nitrogen in the Lake Rotorua Incentives Scheme.

The biggest issue this year has been catfish, and we are looking forward to hearing about the work that has been done with this by Brendon Hicks and Te Arawa Lakes Trust (TALT). The issue is one of containment until we can find a method of controlling them. Grant Wallace and his volunteer team are doing good work catching catfish and maintaining pressure on them.

We have failed getting the community buy-in with the Stop the Troublemakers workshop. LWQS has submitted to the Pest Management Plan requesting that a rule be included requiring boat owners certify that their boats are clean before entering any Rotorua lake. Cleaning of the boat and associated gear is already required under the proposed bylaw, but LWQS feel that there needs to be clear rules requiring boat owners to certify that they have done what was required of them. There are a lot of pests out there that we don't need in our lakes.

The Endothall and Diquat consents are in process, are likely to be approved subject to conditions. It will be good to have another tool to use against lakeweeds.

In the lakes no work done to control lakes weeds which makeup up to 90% of all plants. To restore the native flora much work is required and additional funding from LINZ will be required.

All lakes in the Tarawera Complex are all well above their TLI target. It will be good to have the sewerage input removed and this will allow a focus on reducing phosphorus from the farms, bush and pine plantations.

Lake Rotorua is looking good, but it is being supported by alum dosing. The renewal of the Alum Consent is in process.

Lake Rotoehu continues to be of concern, "our problem child". Dr Stuart Corson has joined the TAG group looking at this lake and hopefully there will be some actions forthcoming.

Membership of the society has dropped off as LWQS moved to an electronic payment system. The committee is putting effort into rebuilding membership and your tolerance and support is appreciated. It is important that when we can talk to Councils it is on the basis that we represent the lakes communities.

Don extended thanks to the following people: the Committee functions very well together and has done a lot of good work over the year; Ken and his linkages to Te Arawa; special thanks to everyone who has been involved in what we have achieved over the year.

It was moved that the Chairman's Report be accepted. *Don Atkinson/Stewart Edward.*

Financial Report

The Treasurer, Marcel van Leeuwen, presented his report. There was no Symposium this year so that is reflected in the earnings, but some of the expenses from last year's Symposium carried through to this year's accounts. Membership is down partly due to the online payment adoption this year.

It was moved that the financial report for the Lakes Water Quality Society Inc. for the year ending 30th September 2018 be received and approved. *Marcel van Leeuwen/Mary Stanton.*

It was moved that Graeme Prior be appointed as auditor for the next financial year *Marcel van Leeuwen/Warren Webber*

Agreed that a letter of thanks to be sent to Stefan Bennett for his work as auditor for LWQS for several years, he retired this year.

Election of Officers

As the current Chair, Don stood down. Dave Donaldson took the Chair and expressed his thanks to Don and the committee of LWQS for their work over the year, and called for nominations.

Don Atkinson was proposed as ongoing Chair, and approved by the meeting *Bob Armstrong / Buzz Rathbone*

Dave congratulated Don and thanked him for his work.

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

All committee members are prepared to re-stand for the next year but a full-time secretary is required – please contact the committee if you are interested.

The committee was nominated *en bloc: Elizabeth Miller/Jim Howland*

Treasurer	Marcel van Leeuwen	(Okareka)
-----------	--------------------	-----------

Committee	Warren Webber	(Rotoiti)
	Libby Fletcher	(Tarawera, LTRA)
	Stewart Edward	(Rotorua)
	John Gifford	(Rotorua)
	Hilary Prior	(Rotoiti, LRCA)
	Phill Thomass	(Chair, RLCB)
	Dr. Ken Kennedy	(Te Arawa Trust)
	John Haszard	(Rotoma)
	Paul Hammond	(Rotoehu)
	Colin Jackson	(Okareka)
	Richard Noak	(Tarawera)
	Stuart Corson	(Rotorua)

Presentations:

Shane Grayling (BOPRC) – Update on the Biosecurity Programme

BOPRC are doing a lot of work around the catfish in Lake Rotoiti and now Lake Rotorua, and it is the biggest biosecurity budget in their programme this year.

The Endothall and Diquat consents have been granted, and BOPRC are working with LINZ on conditions to be applied – with spraying for recreation only 5% of a bay can be treated at any time. Working with LINZ and NIWA on how to apply endothall will start with a small-scale trial.

Submissions to the Regional Pest Management Plan closed 6th November, and there was strong support for LWQS' submission on boat certification.

Questions:

Dr Mark Oliver: In Lake Rotorua mainly male fish are being captured – what is the normal sex distribution among them? Brendon Hicks– can't give a complete answer but research suggests that it should be 1:1.

Brian Stamp: when the consent comes through for Endothall – how soon after that can you start using it? SG: As soon as the consent comes through will start with trials.

Brian Stamp: Why is a trial needed when has been previously used in Southland? SG: Due to advice from experts e.g. NIWA, to make sure that it is applied to the local conditions such as sediment and nutrient loading. This will determine how much funding will be required, and part of the funding arrangement will need to be considered from LINZ.

Don Atkinson: Does the 25%area limitation for Endothall apply to the whole lake or is it for a bay?

SG: Both, and there is a stand-down period after each treatment.

Don Atkinson: With a closed bay like Okawa Bay, how will that be practicable? The policy is very restrictive. What is the process with relation to an objection to the restrictions? SG: Contact Greg Corbett for clarification.

Don Atkinson: The Pathway Management Plan something that LWQS is aware of but does not support, we understood that it would be an additional time delay of 2 years? SG: In terms of timeframes, 2 years might be excessive, but need to make sure that the path is appropriately funded and that we have capacity to make the rule workable. A rule like this will take quite a bit of time and effort.

Grant Wallace: I have caught nearly 2000 catfish off my jetty. The jetty is surrounded by waterlilies and they are growing throughout the bay. I'm sure that catfish like them and living among them – can they be added to the Pest Management Plan. SG: Too late to add them to this year's management plan but might consider for the future.

Jackie McCulloch: Having referred to netting and fishing to control catfish – have BOPRC considered a fishing competition or other ways to enrol the community? SG: Yes, are looking at these kind of

activities – the Catfish Coordinator Role is the one to talk to for this. Would have to work very closely with Fish & Game. At the moment, the majority are very small, so may not be good for a competition.

Nicky Douglas (TALT): happy to take a list after the meeting of people who want to volunteer to catch catfish.

We need to make sure that every lake user is informed as they are a risk. With current technology, elimination is not feasible. Need to raise biosecurity awareness as there are other pests out there that may also get into the waterways in the future.

With regard to the catfish, it is now a human management issue and TALT are working with BOPRC and LWQS on management. TALT are trying to secure funding from government to get a coordinator to bring together all stakeholders on the lakes. Also working on research on taonga species in Lake Okataina.

Doug Leeder, Chair BOPRC:

Congratulations to the committee and to Don for the comprehensive Chairman's Report.

Incentive scheme is \$40m, and committee struggling to get it out to landowners. This is due to the wait for the results of the appeal. There is also a reluctance among landowners and particularly iwi for the encumbrance of 999 years.

Could revisit buying the dairy farms in the Rotorua catchment if no other successful results help to fix Lake Rotorua, apart from alum dosing. Some hard decisions needed not only in Rotorua region but nationwide. Water quality a huge issue.

The increase in the wallaby population needs to be a higher priority in biosecurity. Estimated as a population of more than 1M in the area.

With regards to lake structures - Doug gave an assurance to communities that they would have an update on the situation by end of the month. Both the Lake Rotoiti and Lake Tarawera Community Associations have been sent updates. Likely to be in 2020 by the time all the lake structures across all the lakes are addressed.

Three Waters consultation document requested by Minister for Environment by April from all councils – lakes, rivers and estuaries. BOPRC covers a large land area and communities. This means a large workload for staff, and BOPRC are now borrowing money for capital projects.

The alum dosing project at Tikitere is costed at \$9M, but it will not deliver the results anticipated, so has been stopped.

Geoff Rice (Tapuika Iwi Authority): thanks to BOPRC for the work they have done at Ngongotaha in the weather events. The Incentives Scheme levels that have been reached so far (20 tonne) is fairly impressive, but we need some rules for the catchment before we get any further reductions. DL: BOPRC is reviewing the Incentives Scheme.

Steve Chadwick:

Thanks to Don for the work done so far – government will always need advocacy from communities, particularly on the water quality issue.

The Ngongotaha flood shows that we need a catchment management plan, and it is necessary to manage the on-land issues as well as headwaters and in-lake.

The Rotorua waste treatment upgrade – there is some tension at the moment with hapu regarding the proposed discharge point. The decision from the Environment Court is not expected soon. There will be needs after that for Tarawera and Mamaku communities. The East Rotoiti and Rotoma Sewerage Scheme is progressing, but actual costs per ratepayer are not available yet as RLC have gone to tender.

Illegal rubbish dumping also produces leachate into the lakes, and costs a lot to clean up each year.

It is very good to have these Community Boards (Lakes and Rural) and they do a lot of work.

Brendan Hicks (Professor, University of Waikato) – eDNA and catfish

Brendan gave a basic description of the catfish life cycle and the history of the incursion in Lake Rotoiti. The abnormally warm water temperatures in November/December 2017 led to a very large successful spawning and therefore the catfish population exploded. University of Waikato are trialling taking water samples to test and detect whether there is any catfish eDNA in the retrieved sample, to see if there are any catfish in the surrounding water. Results show that this eDNA method works for catfish in high abundance, and the University is developing identification kits for other pest fish such as koi carp and perch. The University will next test whether they can identify where catfish are in low densities as well.

Questions:

Jeanette Robertson: the recent netting in Okawa Bay – were there any catfish found then, or was it just goldfish? SG: yes, but in fairly low numbers

Dr Mark Oliver: At each site, how many samples taken – what is the likelihood of error? BH: At each site, currently taking one sample from lots of very close sites.

Dr Stuart Corson: What is the likelihood of success of the tool as an exploratory tool, that we can use in other lakes to see if there are any catfish there? BH: Still working to get an idea of the sensitivity of the technique – it doesn't tell us the likelihood that we have missed the presence from when we took the sample.

Don Atkinson: What are the nutrient impacts of the catfish? BH: Predicted scenario of catfish nutrient secretion was commissioned by BOPRC. Predicted to be between 1-6% of the nutrients that are coming into the catchment.

Mary Stanton: Have you thought of how to make money out of catfish, if the numbers are increasing and the cost of the control is coming back to the community? BH: They were introduced to NZ as food fish and are edible and easy to cook. The main problem at the moment is that they are low density and low in size, so would be uneconomic to catch commercially.

Richard Noak: With climate change, are we expecting the abnormally warm weather events to create more spawning opportunities? BH: Yes, for sure. Extreme weather events are likely to become more regular. RN: Are they also likely to be more effected by increasing stratification? BH: stratification is likely to become more prolonged and severe.

Don Atkinson: Is there a natural predator for catfish? BH: Adult catfish are fairly immune to predation, but juveniles are more vulnerable. Brown trout and long-finned eels are potential predators and the possibility of those being introduced are being reviewed. However, they might also eat koura or other taonga species.

Jortin Atkinson: What do you feel the biomass of the catfish population is versus the trout population? BH: Hard to get an idea here, but in the Waikato they are lower than eels or koi carp. Not sure of the biomass of trout in the Rotorua lakes either. Catfish are restricted to the littoral area but trout are far more wide-ranging.

John Gifford proposed a vote of thanks to the guest speakers this morning – Shane Grayling and Brendan Hicks – for coming along today.

General matters

Elizabeth Miller: with regard to the boat cleaning proposals. Very laudable proposal but more thought is needed, included the budget cap. There are practical considerations regarding implementation. What are the definitions regarding what is covered in the definition of boat or associated gear? Who do the rules belong to and can they be policed or who by? There can be a large number of boats on Lake Rotoiti and a rule that can't be policed is not useful. Who would monitor and collect fines? Will people know what boat cleaning is needed? Most emphasis online is

on marine cleaning, and on cleaning before you go to another area. What about the boats that aren't moving between lakes. The community should re-investigate the possibility of boat-cleaning stations. Also clicking on an app will not necessarily deal with one catfish. Some people don't take their cellphones with them everywhere and will ignore the app. Suggest education such as fliers in every ratepayers rate demand.

Don Atkinson: BOPRC have indicated that these issues will be considered. LWQS came from the position that if we do nothing we will fail. Are promoting to ask the question of BOPRC whether they are prepared to adopt it.

Nick Miller: The item in the latest LWQS newsletter didn't indicate any authority that would be involved in running this. DoC were looking at setting up mobile boat cleaning stations several years ago, and the most effective means of cleaning a boat is steam-cleaning.

Shane Grayling: these points are being considered by BOPRC. It would be very costly and timely to police this properly and it also needs to be considered against other priorities in the region. Washdowns would need to be put out across every ramp in the region and would not necessarily be effective in getting all pests – would cost \$100,000 each. Also practical considerations in steam cleaning. BOPRC taking all concerns into consideration. The submission process on this has closed

Sherilyn Coney: Is it correct that catfish can last for at least 2 days out of water in the trailer? SG: Yes, they are very resilient. Sherilyn Coney: Suggest that that point should be made the most prominent to the public because people might not be aware of that.

Don Atkinson: Trying to find a way to engage everybody that goes on the lakes. Where people know the rules around the lakes there is usually compliance. Where there is no firm rule and you just ask for people's goodwill then often it is not followed.

Elizabeth Miller put forward a motion:

That the boat cleaning proposal be revisited to focus on boats moving between lakes, that a strong clean boat education programme be developed, and that the feasibility of boat cleaning stations at major launching ramps be re-investigated. I ask that the proposal be distributed to all members of the Society for comment.

Gerard Horgan seconded the motion. The motion was carried by the meeting.

Don thanked the ladies who have prepared the lunch for everyone today - Dianne, Kaye, Elizabeth, Anne, Jude. Thanks also to everyone for attending the meeting today.

Dr Ken Kennedy closed the meeting with a karakia and blessed the food for lunch.

The meeting closed at 12.30 pm.