



Rotorua Te Arawa Lakes Strategy Group Rārangi Take (Agenda)

NOTICE IS GIVEN that the next meeting of the Rotorua Te Arawa Lakes Strategy Group will be held in the BOPRC Rotorua Office, Waiariki Room, Corner Fenton & Pukaki Street, Rotorua on:

Friday 22 March 2024 COMMENCING AT 12:30 pm or following the conclusion of the Rotorua Te Arawa Lakes Strategy Group Workshop

This meeting will be livestreamed and recorded.

The Public section of this meeting will be livestreamed and recorded and uploaded to Bay of Plenty Regional Council's [Bay of Plenty Regional Council - YouTube](#) . Further details on this can be found after the Terms of Reference within the Agenda.

**Bay of Plenty Regional Council,
Rotorua Lakes Council and
Te Arawa Lakes Trust.**

Working as one to protect our lakes with funding assistance from the Ministry for the Environment

Fiona McTavish
Chief Executive, Bay of Plenty Regional Council Toi Moana
14 March 2024

Rotorua Te Arawa Lakes Strategy Group

Membership

Pōū Tākiwaiora (Independent Chairperson)	Arapeta Tahana
Deputy Chairperson (Appointed by Group) Members Two representatives from each of the partner Councils one of whom must be the Chair/Mayor: Bay of Plenty Regional Council Toi Moana Rotorua Lakes Council Governance representatives from Te Arawa Lakes Trust	Cr Kevin Winters (Bay of Plenty Regional Council Toi Moana) Chairman Doug Leeder Cr Te Taru White (Alternate) Mayor Tania Tapsell Cr Gregg Brown Phill Thomass (Lakes Community Board) (Alternate) Nuki Nicholson Mariana Te Rangi Rangitihi Pene (Alternate) Georgina Whata (Alternate)
Observer from the Ministry for the Environment	Lorena Stephen (Director of Sustainable Land Use Delivery)
Quorum	One appointed member from each of the partner organisations
Meeting frequency	Quarterly

Purpose

To contribute to the promotion of the sustainable management of the Rotorua Te Arawa Lakes and their catchments, for the use and enjoyment of present and future generations, while recognising and providing for the traditional relationship of Te Arawa with their ancestral lakes.

Role

- Provide leadership to the organisations and the community in relation to implementation of the Vision and Strategy for the Lakes of the Rotorua District originally adopted in 2000 and refreshed version adopted by the Strategy Group in 2013.
- Identify significant existing and emerging issues affecting the Rotorua Te Arawa Lakes and respond appropriately.

- Approve, monitor, evaluate, and review agreements, policies and strategies and all other proposals to achieve integrated outcomes for the Rotorua Te Arawa Lakes.
- Identify, monitor, and evaluate necessary actions by the partner organisations and other relevant organisations.
- Receive reports on activities being undertaken by the partner organisations and other relevant organisations.
- Participate in the preparation of statutory plans in relation to significant issues. Such plans include but are not limited to Iwi and hapū management plans, district and regional plans, reserve management plans and annual plans.
- Participate in applications for activities in relation to significant issues not addressed by existing policies of the partner organisations. Such activities include but are not limited to resource consents, designations, heritage orders, water conservation orders, restricting access to the lakes (during special events or in particular circumstances), and transferring and/or delegating of statutory authority.

Strategy Group Procedures

The Rotorua Te Arawa Lakes Strategy Group is a permanent joint committee established under the Te Arawa Lakes Settlement Act 2006 (Te Arawa Lakes Deed of Settlement - Cultural Redress: Lakes Management and Relationships, clauses 9.1 to 9.3 - December 2004) and is not disestablished as a consequence of a Local Government election.

The Group's Terms of Reference are derived from the Rotorua Lakes Strategy Agreement included in Part 1 of the Relationship Schedule to the Deed of Settlement, December 2004.

Meanings:

"Organisations" means the Te Arawa Lakes Trust, the Rotorua Lakes Council, and the Bay of Plenty Regional Council; sometimes referred to as "Partner Organisations".

"Rotorua Te Arawa Lakes" means Lakes Rotorua, Rotoiti, Rotoehu, Rotomā, Ōkātina, Tikitapu, Ōkāreka, Tarawera, Rotomahana, Rerewhakaaitu, Ōkaro.

"Group" means the Rotorua Te Arawa Lakes Strategy Group, formed as a Joint Committee under Clause 30 of Schedule 7 of the Local Government Act 2002; sometimes referred to as the "Strategy Group".

Membership

- The non-voting Poū Tākiwaiaora (Independent Chairperson) is appointed by the members for a three year term in alignment with the Local Government triennium and is to be reviewed and confirmed at the first meeting of the Group following the Local Government elections.
- The Poū Tākiwaiaora is not deemed to be a member of the Rotorua Te Arawa Lakes Strategy Group for the purposes of a quorum.
- The Poū Tākiwaiaora shall assume the role and responsibilities as defined in the Rotorua Te Arawa Lakes Strategy Group Poū Tākiwaiaora Guidelines.
- The Deputy Chairperson shall be appointed from the membership at the first meeting of the Group following the Local Government elections.

Quorum*

The special quorum for a meeting of the Group will be four members of the Group.

In the event that the ordinary quorum is not satisfied at three consecutive meetings of the Group in circumstances, where in the case of each such meeting:

- It was notified in accordance with the Standing Orders;
- Order papers were sent to each member of the Group in accordance with the Standing Orders; and
- The meeting had not been cancelled for any reason, then the members in attendance may declare the third meeting inquorate according to the Standing Orders and the special quorum will then be substituted.

At any subsequent meeting, the ordinary quorum will be restored.

No matters that were not on the order paper for the meeting at which the special quorum was established can be considered by a special quorum meeting.

Power to Act

To make all decisions necessary to fulfil the role of the Strategy Group subject to the limitations imposed.

Each Council participating in a joint initiative will fund its own proportion of that joint initiative as determined by the Joint Committee.

Power to Recommend

To the partner organisations on any matters within the Strategy Group's delegated functions as it deems appropriate.

The Rotorua Te Arawa Lakes Strategy Group report directly to their respective organisations.

Recording of Meetings

Please note the Public section of this meeting is being recorded and streamed live on Bay of Plenty Regional Council's website in accordance with Council's Live Streaming and Recording of Meetings Protocols which can be viewed on Council's website. The recording will be archived and made publicly available on Council's website within two working days after the meeting on www.boprc.govt.nz for a period of three years (or as otherwise agreed to by Council).

All care is taken to maintain your privacy; however, as a visitor in the public gallery or as a participant at the meeting, your presence may be recorded. By remaining in the public gallery, it is understood your consent is given if your image is inadvertently broadcast.

Opinions expressed or statements made by individual persons during a meeting are not the opinions or statements of the Bay of Plenty Regional Council. Council accepts no liability for any opinions or statements made during a meeting.

Please note that the live streaming of the Rotorua Te Arawa Lakes Strategy Group hui will be dependent on the location and availability of Wi-Fi/Technology to facilitate live-streaming.

Recommendations in reports are not to be construed as Council policy until adopted by Council.

Rārangi Take Agenda

- 1. Karakia Whakatuwhera
Opening Prayer**
- 2. Ngā Hōnea
Apologies**
- 3. Wāhanga Tūmatanui
Public Forum**
- 4. Ngā Take Tōmuri
Items not on the Agenda**
- 5. Raupapa o Ngā Take
Order of Business**
- 6. Whakapuakanga o Ngā Take Whai Taha-Rua
Declaration of Conflicts of Interest**
- 7. Ngā Meneti
Minutes**

**Kia Whakaūngia Ngā Meneti
Minutes to be Confirmed**
 - 7.1 Rotorua Te Arawa Lakes Strategy Group Minutes –
22 September 2023** **8**
- 8. Ngā Pūrongo
Reports**
 - 8.1 Correspondence received for information: previous Minister
David Parker (Incentive Funding Transfer)** **23**
 - 8.2 Correspondence received for information: Lakes Water Quality
Society Letter to Chair, Rotorua Te Arawa Lakes Strategy
Group** **24**
**Ngā Whakatau e Hiahiatia Ana
Decisions Required**

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9.	Ngā Take Tōmuri Hei Whakaaroaro	
	Consideration of Items not on the Agenda	
10.	Karakia Kati	
	Closing Prayer	

Rotorua Te Arawa Lakes Strategy Group

Ngā Meneti Open Minutes

Commencing: Friday 22 September 2023, 9:30 am

Venue: Bay of Plenty Regional Council Office, Waiariki Room, Corner Fenton & Pukaki Street, Rotorua and via Zoom (Audio Visual Meeting)

**Heamana
Chairperson:** Pou Tākiwaiora Arapeta Tahana

**Heamana Tuarua
Deputy Chairperson:** Councillor Kevin Winters (Bay of Plenty Regional Council Toi Moana (BOPRC))

Ngā Kopounga Members:

Te Arawa Lakes Trust (TALT)

Mariana Te Rangi; Georgina Whata (Alternate)

Rotorua Lakes Council (RLC)

Mayor Tania Tapsell; Cr Gregg Brown; Phill Thomass – Lakes Community Board Chair (Alternate)

BOPRC

Chairman Doug Leeder; Cr Te Taru White (Alternate)

Ministry for the Environment (MfE)

Observer Lorena Stephen - Director, Investments, Policy, Implementation and Delivery (via Zoom)

Te Hunga i Tae Ake In Attendance:

TALT: Dr Daryn Bean - Tumu Whakarae (Chief Executive); Soweeta Fort-D'Ath - Lakes Programme Coordinator; William Anaru - Biosecurity Manager

RLC: Gina Rangi – Acting Chief Executive; Stavros Michael – Deputy Chief Executive Environmental and Infrastructure Solutions

BOPRC: Cr Lyall Thurston; Chris Ingle – General Manager, Integrated Catchments; Greg Corbett - Biosecurity Manager; Te Wakaunua Te Kurapa – Biosecurity Officer; Rosemary Cross - Senior Projects Manager, Rotorua Catchments; Gemma Moleta – Senior Planner (Water Policy); Esther Coenen – Communications Advisor (via Zoom); Melissa Williams - Communications Partner (Via Zoom); Merinda Pansegrouw – Committee Advisor

Other: Te Kuramea Karere – Public Forum Speaker; Cyrus Hingston Tarāwhai Iwi Trust Chairman; Dr Kenneth Kennedy - LakesWater Quality Society; Lana Ngawhika - Director Te Rani Consulting.

Ngā Hōnea Apologies:

Nuki Nicholson (TALT); Cr Te Taru White (BOPRC) for lateness and Chairman Doug Leeder (BOPRC) for early departure

Declaration of Public Recording

Committee members and the public were reminded that the meeting was being recorded and would be made available on the Bay of Plenty Regional Council website following the meeting and archived for a period of three years: [Rotorua Te Arawa Lakes Strategy Meeting - 22 September 2023 - YouTube](#)

1. Karakia Whakatuwhera Opening Karakia

Karakia provided by Pou Tākiwaiora Arapeta Tahana.

Extended a warm welcome to Dr Daryn Bean, new Tumu Whakarae (Chief Executive) for TALT and Mariana Te Rangi newly appointed TALT representative on Rotorua Te Arawa Lakes Strategy Group.

2. Ngā Hōnea Apologies

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 **Accepts the apologies from Nuki Nicholson, Cr Te Taru White (for lateness) and Chairman Doug Leeder (for early departure), as tendered at the meeting.**

Winters/Tapsell
CARRIED

3. Wāhanga Tūmatanui Public Forum

3.1 Te Kuramea Karere – Lake Rotoma and Lakes Rotoehu Reduction Proposal

*Tabled Document 1 - Public Forum Lake Rotoma and Rotoehu Reduction proposal
Lakes Strategy Meeting: Objective ID A4491678*

*Tabled Document 2 - Public Forum - Rotoiti Rotoma Proposal Additional Data:
Objective ID A4491679*

Presented by Te Kuramea Karere.

Key Points - Te Kuramea Karere:

- Presented a proposed solution to reduce the water volume in Lake Rotoma and Lake Rotoehu to address the challenges posed by high water levels in the lakes (Reference Tabled Documents 1 and 2)
- Aspiration was to be resilient/innovative and think “outside the box” in order to reduce water levels through the implementation of a mechanical evaporation system
- Took six weeks off work to develop this concept/report
- Highlighted the negative impacts of high lake levels on properties, infrastructure and the environment; emphasised the need for a solution to mitigate these impacts, even though there was currently a dry spell / summer season
- Referenced various aspects of the project, including technical details, site considerations, environmental implications, logistical challenges, regulatory requirements and basic cost analysis
- Highlighted the need for collaboration between stakeholders, including TALT, BOPRC and local iwi
- Engagement was crucial for effective communication, regulatory compliance, and addressing cultural and environmental concerns
- Focussed on the contents of Tabled document 2, which provided additional data and focused on the variations observed in Lake Rotoma’s water levels during different documented El Niño-Southern Oscillation (ENSO) related weather patterns
- Data supported the proposal and helped in understanding the relationship between ENSO weather patterns and Lake Rotoma’s water levels.

Key Points – Members:

- Acknowledged the hard work/dedication by Te Kuramea Karere in supporting the community with the innovative proposal and thinking big; encouraged him to consider further possibilities for future use
- Recognised that further investigation into financial planning and regulatory compliance would be required.

Items for Staff Follow Up:

- Referral of Te Kuramea Karere’s Lake Rotoma and Lakes Rotoehu Reduction Proposal to the Te Arawa Lakes Technical Working Group
- Pou Tākiwaiaora, on behalf of members of the Rotorua Te Arawa Lakes Strategy Group, to respond to Te Kuramea Karere with a letter of appreciation, advising of the next steps.

4. Whakapuakanga o Ngā Take Whai Taha-Rua Declaration of Conflicts of Interest

None

5. Ngā Meneti Minutes

Kia Whakaūngia Ngā Meneti Minutes to be Confirmed

5.1 Rotorua Te Arawa Lakes Strategy Group Minutes - 23 June 2023

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Confirms the Rotorua Te Arawa Lakes Strategy Group Minutes - 23 June 2023 as a true and correct record.

Winters/Brown
CARRIED

6. Ngā Pūrongo Reports

6.1 Correspondence Received

Tabled Document 3 - Letter to TALSG partners from Mayor Tapsell - Rotoiti Rotoma Wastewater Scheme Funding - 21 September 2023: Objective ID A4490875

The Rotorua Te Arawa Lakes Strategy Group noted the following correspondence:

- Letter to the Rotorua Te Arawa Lakes Strategy Group partners from Mayor Tapsell regarding the Rotoiti Rotoma Wastewater Scheme Funding, dated 21 September 2023.

6.2 Appointment of Representatives for Te Arawa Lakes Trust on the Rotorua Te Arawa Lakes Strategy Group

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Receives the report, Appointment of Representatives for Te Arawa Lakes Trust on the Rotorua Te Arawa Lakes Strategy Group;
- 2 Notes that Te Arawa Lakes Trust Board, at its meeting held on 28 June 2023 had confirmed Nuki Nicholson and Mariana Te Rangi as representatives on Rotorua Te Arawa Lakes Strategy Group with Rangitihi Pene and Georgina Whata as the alternate representatives for Te Arawa Lakes.

Tapsell/Winters
CARRIED

6.3 Verbal Update: Freshwater Gold Clam Response Update

Presented by: Greg Corbett, BOPRC Biosecurity Manager and Cyrus Hingston Tarāwhai Iwi Trust Chairman, supported by William Anaru - TALT Biosecurity Manager and Te Wakaunua Te Kurapa - BOPRC Biosecurity Officer.

Key Points – BOPRC Staff:

- Freshwater gold clams (*Corbicula fluminea*) had been detected in the Waikato River near Lake Karapiro in early May 2023
- Gold clams had the potential to destroy native habitats and clog water supplies. They were self-fertile prolific breeders
- Experience from overseas had shown the gold clam was highly invasive and difficult to control – it had never been eradicated from any site where it had established
- Immediately following the detection of gold clam in the Waikato region, BOPRC and TALT staff surveyed potentially vulnerable areas of the Rotorua lakes with no detections to date
- Gold clam mainly spread through vessel movements
- Biosecurity New Zealand staff had been undertaking further ongoing surveillance
- There was a high likelihood that freshwater gold clam (*Corbicula fluminea*) would be discovered in the Bay of Plenty region
- BOPRC had directed its staff to continue surveillance for gold clam in the region and continue supporting the Ministry for Primary Industries (MPI)/discuss potential ways to manage gold clam
- Surveillance for gold clam had been incorporated into BOPRC's biannual surveillance programme for the Lakes
- BOPRC would continue with boat ramp compliance (Rule 7 of the Regional Pest Management Plan (RPMP)) to help reduce the risk of gold clam arriving in the region

Key Points – TALT Staff:

- TALT had received notification of the freshwater gold clam (*Corbicula fluminea*) threat from the iwi collective and not MPI
- Was extremely concerned about the threat; therefore deemed the matter as serious
- Whānau had supported that more needed to be done in this space as MPI's response might be insufficient
- Had requested an Open Forum with MPI to discuss the latest biosecurity threat facing roto moana (Hui was scheduled for 27 September 2023).

Key Points – Cyrus Hingston, Ngāti Tarāwhai Iwi Trust Chairman:

- Provided Tarāwhai Iwi's perspective to the freshwater gold clam threat

- Was gravely concerned about the threat and possible spread to Lake Ōkātina (Lake Ōkātina was of great cultural, spiritual and ecological importance to the people of Ngāti Tarāwhai)
- Had been given the mandate by Ngāti Tarāwhai Iwi Trust beneficiaries to take all steps possible to prevent the spread
- Had accordingly approached TALT, who held all the lake beds in trust
- Within the next week the fishing season would open with numerous fishermen coming across from the Waikato region, increasing the risk of spread
- Had attended a recent hui with Biosecurity New Zealand who had indicated that they were monitoring/testing and informing the public accordingly; however, voluntary compliance was all they could do at this stage. Ngāti Tarāwhai Iwi Trust viewed this action would not stop the spread
- Was looking at all options to protect the Lake and seeking a temporary closure of Lake Ōkātina to boat traffic while a long-term plan to manage the threat of the gold clams could be established. Enquired about a legal option to temporarily close the Lake until proper measures were in place to stop the spread
- Acknowledged that the closure would have a negative economic impact on the community. However, stressed that the impact on the wai would be of far bigger significance
- Noted that several public lakes events had been planned for the 2023/24 summer period.

Key Points - Members:

- TALT supported the temporary closure of Lake Ōkātina; acknowledged the potential negative economic impact
- Under the Maritime Transport Act 1994, a harbourmaster could only close lakes for the purpose of ensuring maritime safety/navigational safety issues
- Recognised that the Biosecurity Act 1993 provided MPI with the power to close a lake to place a controlled area notice as a temporary means to prevent the incursion of a pest to an area
- Acknowledged the power of “community buy-in”
- Members expressed general support to further investigate the temporary closure of Lake Ōkātina by MPI and furthermore encouraged MPI to support Ngāti Tarāwhai to protect the Lake; acknowledged that there had not been an opportunity to consult with the respective organisations that members represented
- With the opening of the fishing season, recognised the urgency and the need to elevate the matter to a level of action
- Members concurred that the Open Forum (to discuss the latest biosecurity threat facing rotomoana, hosted by TALT and MPI) scheduled for Wednesday, 27 September 2023 at 5:30 pm at the Millennium Hotel, 1270 Hinemaru Street, Rotorua would be an opportunity for the Strategy Group

to voice their support for Ngāti Tarāwhai's request for a temporary closure of Lake Ōkātina until such time that proper measures to prevent the spread of gold clam had been put in place.

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Receives the report, Verbal Update: Freshwater Gold Clams Response Update; and**
- 2 Supports in principle (encourages), the urgent investigation into the temporary closure of Lake Ōkātina to boats by the Ministry for Primary Industries under the Biosecurity Act, based on the significant biosecurity threat posed by the Freshwater gold clams (*Corbicula fluminea*).**

**Tapsell/Te Rangi
CARRIED**

10:26am – Cr Te Taru White joined the meeting.

6.4 Verbal update on Strategy Review Process

Presented by: Lana Ngawhika – Consultant/Director Te Rani Consulting.

Key Points:

- Provided a verbal update on progress made with the review process to date
- Currently reviewing the terms of reference
- Had undertaken interviews with 25 individuals (including the lead negotiator for the Te Arawa Lakes claim)
- Two sections of the draft report, including the governance review, had been completed
- Next step would include a discussion with the panel to review the recommendations to the Strategy Group
- Thanked all for their robust/honest contributions
- Timeline for completion: scheduled to present the report for consideration by members of the Strategy Group at a workshop to be held on 8 December 2023.

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Receives the report, Verbal update on the Strategy Review Process.**

**Leeder/Winters
CARRIED**

10:45am – The meeting adjourned.

11:00am – The meeting reconvened.

6.5 Te Arawa Lakes Trust Update to the Rotorua Te Arawa Lakes Strategy Group - 22 September 2023

Presented by: Soweeta Fort-D'Ath - TALT Lakes Programme Coordinator.

Key Points:

- Outlined the activities of TALT in the Rotorua/Te Arawa Lakes Programme
- Focus had been the uplifting of Te Whakapapa o Te Wai (the Guiding Values): Waioara/Wairua/Waiata
- Waioara – through partnership, pursuing opportunities and resources to secure long term positive outcomes for the health and wellbeing of Te Arawa and the Te Arawa Lakes and all that they support
- Wairua – facilitating space and building on the connection between Te Arawa whānau, hapū and iwi and the Te Arawa Lakes through engagement and capacity and capability building initiatives
- Waiata – celebrating Te Arawa mātauranga excellence and success as it related to te taiao and inspiring the next generation to pursue opportunities in these spaces
- The second annual Fish Futures Symposia was being held on 28-29 September 2023 at Tāheke Marae (119 Ōkere Road, Ōkere Falls, Rotorua), the purpose being the Fish Futures research team to gain insight into Te Arawa Lakes, the people at place and to share learnings.

Key Points - Members:

- Commended TALT staff for the comprehensive report and passionate commitment/mahi
- Looked forward to seeing the outcome of Phase 2 of the Uwhi Project, particularly the impact on koura
- Invited TALT staff to share the Aquatic Lake Weed Spray Programme with the Rotorua Lakes Community Board to enable the sharing of information on social media to increase public awareness/inform the relevant communities.

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Receives the report, Te Arawa Lakes Trust Update to the Rotorua Te Arawa Lakes Strategy Group - 22 September 2023.**

**Tapsell/Brown
CARRIED**

11:20am – Georgina Whata joined the meeting.

6.6 Verbal Update - Ministry for the Environment

Presented by: MfE Representative Lorena Stephen, Director, RM Implementation, Policy, Implementation and Delivery.

Key Points:

The Spatial Planning Act (SPA) and the Natural and Built Environment Act (NBA) began coming into effect on 24 August 2023

- SPA and NBA to be gradually phased in over a 10-year period; MfE would work with representatives from local government, iwi, hapū, Māori organisations and the sector to consider what information, guidance and training would be required to support the dual system
- Some changes in the new legislation started on 24 August 2023. Examples included:
 - fast-track consenting for certain housing and infrastructure developments
 - a new maximum duration for new freshwater-related consents
 - changes to council enforcement powers and penalties
 - changes to the management of contaminated land
 - changes to aquaculture management
 - changes to who can apply to be a requiring authority
- Over the coming months more detail would be made available as MfE worked with advisory groups, partners and the sector to inform guidance, information and support that was required for implementation.
- [New laws enacted for resource management reform | Ministry for the Environment](#)

Natural Hazards

- MfE had released a discussion document on the Proposed National Policy Statement - Natural Hazard Decision-making (NPS-NHD) on 18 September, and were currently seeking feedback
- Aimed to support local government decision making on new development in areas that were at high risk from natural hazards, to manage risks to people and property from natural hazards such as floods, landslides and coastal inundation
- NPS-NHD would ensure that local government considered the risk of all natural hazards (including the effects of climate change) when making decisions relating to all new developments
- This would be developed over the next one to two years. Consultation period to close 13 November 2023
- [Have your say on managing natural hazard risk | Ministry for the Environment](#)

National Planning Framework

- MfE was developing a transitional National Planning Framework (NPF), which would provide direction and guidance for both regional spatial strategies and natural and built environment plans on the things that matter at the national and regional level
- The NPF would bring together 23 pieces of existing national direction – such as the National Policy Statement for Freshwater Management and the National Policy Statement for Urban Development – into one cohesive document. The transitional NPF would also include new national direction on infrastructure, environmental limits and targets, and implement outcomes including the relationship of iwi and hapū with their taonga
- MfE had conducted engagement on the transitional NPF up to the end of June 2023 and would conduct further targeted engagement on the Statutory Engagement Draft through the remainder of 2023
- Targeted engagement would focus on engaging Māori groups to ensure they had an early opportunity to give feedback on the proposed NPF, and in particular Post Settlement Government Entities (PSGEs) in accordance with existing Treaty settlement commitments. There would also be targeted engagement with local government as key implementers of the NPF
- Notification of the transitional NPF proposal was likely to occur in early 2024. Once the transitional NPF was notified, an independent board of inquiry process would begin. During the board of inquiry process, iwi/hapū/PSGEs would be encouraged to provide feedback via submissions and/or hearing
- The Minister would make final decisions on the NPF proposal, having regard to the board of inquiry report
- The final version of the transitional NPF was anticipated to come into effect in mid-2025.

National Policy Statement for highly productive land

- The Government wanted feedback on potential amendments to the National Policy Statement for Highly Productive Land (NPS-HPL)
- Since the NPS-HPL took effect in 2022, concerns had been raised about how it may restrict the development of activities not relying on highly productive land (HPL) but needing to be located on it for particular reasons. The activities included:
 - renewable electricity generation (particularly solar)
 - intensive indoor primary production (e.g. indoor pig, poultry and mushroom farms), and
 - greenhouses
- Feedback was required from those interested in renewable electricity generation, indoor primary production and greenhouses. Consultation was open until 31 October. More information available: [Potential amendments](#)

[to the National Policy Statement for Highly Productive Land | Ministry for the Environment.](#)

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Receives the verbal update by the Ministry for the Environment to the Rotorua Te Arawa Lakes Strategy Group - 22 September 2023.**

**Tapsell/Winters
CARRIED**

6.7 Rotorua Lakes Council Update Report to Rotorua Te Arawa Lakes Strategy Group 22 September 2023

Presented by: Stavros Michael, Deputy Chief Executive, Environmental and Infrastructure Solutions, RLC.

Key Points:

- Provided an update on RLC activities that related to lake water quality
- Activities currently underway included wastewater treatment, stormwater projects, and planning policy matters
- Rotomā/Rotoiti Sewerage Scheme was progressing well; recent weather patterns (high lakes levels) and complex legal whenua Māori consents had slowed down the rate of installations, however, appropriate extension of time had been granted to fully complete the scheme
- Upgrade of the Rotorua Wastewater Treatment Plant was progressing well
- Sustainable Forest Alternative - detailed feasibility of the preferred site would soon commence and once the outcome was known the next phase of design work would commence
- Tarawera Sewerage Scheme - Stage 1 construction and work was currently well underway; next step for Stage 2 included community engagement during October with the aim of transitioning to physical works commencing early 2024
- Stormwater Resource Consent: RLC were currently implementing a comprehensive management system process, with an application to the Infrastructure Acceleration Fund (estimated at \$120M over the next seven years)
- RLC Future Development Strategy (FDS) - majority of submitters had expressed their support for the direction of the FDS at the hearings
- RLC Housing for Everyone - Plan Change 9 - anticipated that the Panel would provide their recommendations to Council by the end of the year.

Key Points - Members:

- BOPRC Councillors expressed interest in joining RLC Councillors on any site visits to projects that related to lakes water quality
- Advised that RLC Chief Executive Geoff Williams had recently announced his retirement and that Gina Rangi had been appointed as Interim Chief Executive while the recruitment process was being completed
- Expressed sincere appreciation for Geoff Williams' leadership and the positive and constructive relationships he had developed with iwi, government agencies, and other community partners during his time as Chief Executive.

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 **Receives the report, Rotorua Lakes Council Update Report to Rotorua Te Arawa Lakes Strategy Group 22 September 2023.**

**Brown/Te Rangi
CARRIED**

6.8 Programme Status Update and Purongo ā-tau 2022-2023

Tabled Document 4 - Daily Mean Lake Levels from April 2022 to Sept 2023 - RTALSG Hui 22 September 2023: Objective ID A4493018

Presentation - Constructed Wetlands Progress Sep 2023: Objective ID A4493657

Presented by: Chris Ingle – General Manager, Integrated Catchments and Rosemary Cross, Senior Projects Manager (Rotorua Catchments).

Key Points:

- Provided tabled document with daily mean lake level graphs from April 2022 to September 2023 for the following lakes: Rotomā, Rotoehu, Rotorua (at Mission Bay) and Rotoiti (at Okawa Bay)
- Provided key programme updates for the programme as at September 2023
- Highlighted progress made with constructed wetlands: commenced construction of a 9-hectare wetland in the upper Puarenga catchment and continued work to secure access to and approvals for further sites (31 Ngongotahā Road).

Key Points - Members:

- With reference to the 3 year average Trophic Level Index (TLI), suggested that a 5 year TLI would be more useful
- Expressed disappointment at not making the desired impact/achieving the TLI level targets; particularly in the context of all the time/resources that had been dedicated to date. Suggested a reinvention in terms of next steps in order to achieve the TLI targets
- Noted that the science review, recently completed under the leadership of Prof Deniz Özkundakci (Toiwarewa Waimāori Bay of Plenty Regional

Council Chair), had suggested a wider range of monitoring measures to be implemented to review lake statistics/water quality attributes.

Item for Staff Follow Up:

- Presentation to be provided to the Strategy Group at a future meeting, explaining/clarifying the allowed lake levels (regulatory requirements for opening/closing of the gates) to ensure a clear understanding by all.

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Receives the report, Programme Status Update and Purongo ā-tau 2022-2023.**
- 2 Approves the Purongo ā-tau 2022-2023 for submission to the Ministry for the Environment, as per the requirements of the Deed of Funding for the Programme.**

**Te Rangī/Winters
CARRIED**

11:50am - Chairman Leeder **withdrew** from the meeting.

6.9 Draft Terms of Reference for Te Arawa Lakes Technical Working Group

Presented by: Chris Ingle – BOPRC General Manager, Integrated Catchments and Stavros Michael, RLC Deputy Chief Executive, Environmental and Infrastructure Solutions.

Key Points:

- Purpose of the Te Arawa Lakes Technical Working Group (Working Group) would be to undertake a strategic assessment of the foreseeable risks to lakeside communities of climate change driven lake level fluctuations across the Te Arawa Lakes; and make recommendations to the Strategy Group on measures for feasible short, medium and long-term adaptation action and possible options for funding these
- The Working Group's first meeting was to be scheduled for October 2023, with monthly meetings to follow
- Working Group to present its recommendations report to the Rotorua Te Arawa Lakes Strategy Group at its meeting in June 2024.

Key Points - Members:

- Acknowledged that the issue of managed retreat would require further collective consideration
- Assured members of the public present that the Working Group would work closely with affected communities (as per Objective 3 of the terms of reference)

- Respectfully recognised the ebb and flow/moving boundaries of the lakes/ unpredictable character of Mother Nature claiming back what was once hers.

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 **Receives the report, Draft Terms of Reference for Te Arawa Lakes Technical Working Group.**
- 2 **Approves the Terms of Reference for the Te Arawa Lakes Technical Working Group.**

**Tapsell/Winters
CARRIED**

12:35pm – Mayor Tapsell **withdrew** from the meeting.

6.10 Essential Freshwater Policy Programme Update

Presentation - Essential Freshwater Policy Programme Update to RTALSG hui - 22 September 2023: Objective ID A4492907

Presented by: Gemma Moleta – Senior Planner (Water Policy).

Key Points:

- Since 23 June 2023, two community drop-in events were held (23 June and 8 July) with a small number of attendees at each event
- Final Freshwater Management Unit (FMU) event scheduled for 22 September 2023
- Feedback could be provided via: in person, online and in hard copy
- Cited key concerns/questions raised at events
- Tangata whenua engagement had focussed on current engagement projects/relationships
- Highlighted community feedback received to date.

Key Point - Members:

- Highlighted the importance of protecting native species and ensuring the lakes returned to their original pristine conditions (i.e. the protection/closure of Lake Ōkataina).

Resolved

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 **Receives the report, Essential Freshwater Policy Programme Update.**

**Winters/Brown
CARRIED**

7. Karakia Kati Closing Karakia

Karakia provided by Cr Te Taru White.

12:45 pm – the meeting closed.

CONFIRMED

Pou Tākiwaiora Arapeta Tahana
Independent Chairperson, Rotorua Te Arawa
Lakes Strategy Group

Hon David Parker BCom, LLB

Attorney-General
Minister for the Environment
Minister of Revenue
Associate Minister of Finance



COR5102

Arapeta Tahana
Te Arawa Lakes Trust
PO Box 128
Rotorua, 3040

Tēnā koe Arapeta Tahana

Thank you for your letter of 24 July 2023 raising concerns around the funding of the Rotoiti Sewerage Reticulation Scheme.

I wish to first acknowledge that the funding decision was disappointing to you. I held, and still hold, concerns about the delay in confirming a mechanism by which the Rotorua Lakes District Council will reimburse the Incentive Scheme.

I was initially advised that this was to be via a targeted rate but wish to make clear that I did not request or insist on this as the reimbursement mechanism. My priority is ensuring the overall success of the Rotorua Te Arawa Lakes programme, and I see the Rotorua Te Arawa Lakes Strategy Group (RTALSG) partnership as very important in achieving the freshwater quality outcomes for the Lakes.

I understand that the Strategy Group's Terms of Reference Review will include a review of how the partners work together. I look forward to hearing from the RTALSG partners on the outcome of the review in due course.

Nāku noa, nā

Hon David Parker
Minister for the Environment



11/03/2024

Chair, Rotorua Te Arawa Lakes Strategy Group

Kai ora Arapeta

The LakesWater Quality Society is aware of the work currently underway related to the review for the Rotorua Te Arawa Lakes Strategy Group. As we indicated to the Strategy Group back in April 2022 (see attached paper) there is a need for this review process to occur and to consider the terms of reference, the structure of the Strategy Group, the strategy, and the scientific and technical aspects of the entire Rotorua Lakes Programme.

After being involved in the Rotorua lakes restoration programme over the last 20 years, the LWQS has the view that there are some critical elements that are needed for our ongoing lake restoration journey. These are:

- The Rotorua Lakes restoration process requires the buy in from the whole Rotorua Community as everyone in the catchments has a role to play and a valuable perspective to contribute.
- Successful requests for funding to any potential funding agency (Central Government, Local Government, or philanthropic groups) is most likely going to require strong community support. It is our observation that strong political activism and community wide pressure was key to getting the previous central government funding for the start of the Lakes restoration programme back in 2008. Furthermore, it was a factor in the establishment of an appropriate settlement with Te Arawa and a shared governance group.
- Any strategy development process for the sustainable management of the lakes will require an open and transparent approach with equitable opportunity for input from all stakeholders.
- All parties need to come to the table with a “sustainable management of the lakes” focus and as the central kaupapa.
- There needs to be a high-level strategy which sets the direction of travel, but underneath this there needs to be a suite of sub-strategies that guide the actions required to address specific issues. This is required because most of the water quality and lake management issues are complex, interlinked, multidimensional and require integrated solutions. Such sub-strategies may include invasive pest management, lakeweed management, nutrient removal, management of the quantity of water which flows into the lakes and lake levels, climate change, urban development, increased pressure from recreational use and mahinga kai, as examples.

As part of the review process, we would like you to consider a proposal from the LWQS.

The LWQS proposes that the Strategy Group develops a two-tiered structure where there is an overall ‘leadership group’ (as required in the Settlement agreement and which remains as the voting parties), but then there is a second group that advises and contributes to the effective functioning of the Strategy Group. This second group would consist of experts and community stakeholders (such as LWQS, Fish and Game, Community Associations, Lakes Community Board, Waikato University, hapu groups, NIWA and there may be others). This second-tier group would

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directly contribute to strategy development, collective review, and input into the technical and scientific aspects of the lakes programme, input into funding priorities and allocations, and provide a conduit for information flow back to the community.

Lake restoration and sustainable management of the Rotorua lakes requires a political, social and technical/scientific approach. To succeed we need a good relationship with central and local government, and a robust interface with all community stakeholders including iwi, as well as a solid technical base. In reshaping the RTALSG, we need to adjust the value structure that directs the kaupapa, confirm the high-level strategy based on the science, consider what sub-strategies are needed, look at the funding required and where this may come from, considering the politics, and then develop the structure fit for delivering these outcomes.

The LWQS looks forward to working with Te Arawa Lakes Trust, Rotorua Lakes Council and Bay of Plenty Regional Council and the future Strategy Group to restore the mana and develop a more robust science programme for the Rotorua Lakes, so that the whole Rotorua community can enjoy our lake environments now and into the future.


I am going to be away on the 22 March, when it is scheduled to have the next workshop on the review process for the Strategy Group. Though I am hoping to have representatives of the LWQS attend this hui.

Thank you for considering our proposal and we look forward to advancing this kaupapa with you.

Yours sincerely

John Gifford

Chair, LWQS



Attachment:

LakesWater Quality Society Submission to the Rotorua Te Arawa Lakes Strategy Group – April 2022.



20 April 2022

MEMORANDUM TO
ROTORUA TE ARAWA LAKES STRATEGY GROUP

Background

The LWQS is concerned that restoration of the Rotorua Lakes is stalling and that ongoing progress in improving water quality, effective management of aquatic pest weeds, management of pest incursions and ongoing catchment management needs to be reviewed and refreshed for all Rotorua Te Arawa Lakes.

Indicators of our restoration activities may not be on course to achieve the outcome we were expecting are:

- Increasing incidence of algae blooms in Lake Rotorua
- Increasing algae blooms in Lake Rotoiti
- Persistence of algae blooms in Lake Rotoehu
- TLIs values across many lakes stubbornly remaining above the target TLI
- Significant weed issues at the Lake front area for Lake Rotorua and in Lake Rotoiti (particularly in Okawa Bay)
- Seven of the lakes indicating “very likely worsening” total phosphorus levels in the 10 year trend and 4 Lakes indicating similar trends for total nitrogen.

The issues above indicate that we may not know quite what is happening in the lakes and raises the question as to whether our current actions alone are sufficient to ensure the long-term sustainable management of the Lakes.

In addition to these trends, there have been several recent changes to freshwater management which also now need to be considered as part of the long-term restoration efforts for the Rotorua Lakes. These include:

- Revision and updating of the Land and Water plan in the context of the NPS-FW
- The implementation of Mana o te Wai
- The three waters changes and its relationship to the long-term management of potable water resources, stormwater management and wastewater.
- The impacts of climate change
- Changing public perceptions and values related to freshwater resources and their sustainable management
- Increasing urban development

Actions

To address these issues, two recommendations were presented at the LWQS AGM related to the ongoing activities of the Rotorua Te Arawa Lakes Strategy Group:


1. The Terms of Reference of the Rotorua Te Arawa Lakes Strategy Group are formally reviewed to consider regulation changes (such as Three Waters, the implementation of Te Mana o te Wai, and revisions to the Land and Water plan due to the NPS-FW). In addition, there are significant changes in public awareness of freshwater values and how these are

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- affecting and influencing attitudes. Such changes need to be considered for implementing future management options for the long-term sustainable management, use and enjoyment of the Rotorua Lakes for present and future generations.
2. A technical and scientific review is undertaken for the whole Rotorua Te Arawa Lakes programme and to consider the pathway ahead for the next 10 years for all the Rotorua Te Arawa lakes (accepting that some changes such as groundwater inputs will be long term, particularly for Lake Rotorua). The need for this review is driven by events that are occurring in the Lakes that are unexpected such as the recent reoccurrence of algae blooms in Lake Rotorua and Rotoiti, and TLIs not reducing (i.e., improving) as fast as was originally considered possible or likely. This situation most likely reflects that we do not know quite what is happening in the Lakes. In addition to these changes, we are seeing increasing influences from climate change, greater pressures raising from urban development, and other land use changes all of which now need to be more formally recognised in the context of the technical and scientific programme for the lakes. The focus of this review needs to address if there are additional pragmatic measures that can be undertaken in the short to medium term to support the overall objective of sustainable management of the Lakes.

The LWQS recommends that the Strategy Group actions the two recommendations.

Nga mihi maioha



John Gifford
Chair, LWQS



Pūrongo Ki: Report To:	Rotorua Te Arawa Lakes Strategy Group
Rā Hui: Meeting Date:	22 March 2024
Kaituhi Pūrongo: Report Writer:	Helen Creagh, Rotorua Catchments Manager
Kaiwhakamana Pūrongo: Report Authoriser:	Chris Ingle, General Manager, Integrated Catchments
Kaupapa: Purpose:	To update Strategy Group on progress of a business case for additional investment into lakeweed management throughout the Rotorua Lakes

Effectively addressing the aquatic weed challenge in Rotorua Te Arawa Lakes

Whakarāpopototanga Executive Summary

Te Arawa Lakes Trust, Bay of Plenty Regional Council, Rotorua Lakes Council, Lakes Water Quality Society and Waikato Regional Council (the partners), with support from Toitū Te Whenua - Land Information New Zealand (LINZ), have commenced work on developing a business case to explore options for enhancing the management of lake weeds in the Te Arawa Lakes catchments. Place Group Limited has been engaged to independently develop and test the business case.

The partners to this business case are seeking support from Rotorua Te Arawa Lakes Strategy Group to continue with Phase 2 and complete the remaining four cases, and to elevate the importance of addressing the lake weed problem with the relevant Crown agencies.

Completion of the business case is required to enable the partners to bid for both central government funding, and local funding through council Long Term Plan processes, as appropriate, and could also assist in leveraging private funding to address the problem.

Ngā tūtohutanga Recommendations

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Receives the report, Effectively addressing the aquatic weed challenge in Rotorua Te Arawa Lakes;**
- 2 Supports the continuation of this business case through to the final stages of completion, which includes exploration of options for delivery through the development of the: economic, financial, commercial and management cases.**
- 3 Supports the business case partners to elevate the importance of the issues addressed in the business case with the relevant Crown agencies (our funding partners).**

1. He Whakamārama Background

Since the discovery of Elodea in Lake Rotorua in the 1930s, the presence of several lake weeds has been a long-standing problem within Te Arawa Lakes. Although interventions to try and address the lake weed problem date back to the 1950s, management has often been on an ad hoc basis, due to limited resources and information available. Most research and management efforts have been focussed on nutrient management to improve water quality (Miller, 2020).

Four of the world's five worst aquatic weeds (hornwort, egeria, lagarosiphon and elodea) are present in the lakes and have continued to expand and spread to new lakes since their introduction in the 1930s. With recent improvements in water quality, ideal conditions have been created for these lake weeds to thrive. Without adequate management (and funding), the economic, environmental, social and cultural gains hoped for as a result of water quality improvements won't be fully realised.

Over the past several decades, increased funding targeting nutrient management within Te Arawa Lakes has successfully reduced nitrogen and phosphorus levels, resulting in corresponding improvements in water quality and clarity. However, recent studies have shown that contrary to popular belief, controlling eutrophication is not a successful strategy to reduce weed biomass, and improvements in lake water quality have created the ideal environment for lake weed to proliferate (de Winton et al, 2019).

Lake weeds can have significant impacts on economic, environmental, recreational and cultural values, have the potential to cause ecological collapse, and may undermine restoration efforts achieved within the lakes to date. To truly realise the benefits of the investment into nutrient management, it is therefore critical to also address the lake weed problem.

2 Treaty Settlement

Restoration of Te Arawa Lakes is integral to ensuring delivery of the Te Arawa Deed of Settlement which is underpinned by the Treaty of Waitangi and the Te Arawa Lakes Settlement Act 2006 and binds the Crown. A key part of the Deed of Settlement is cultural redress relating to relationships, which outlines that the traditional relationship of Te Arawa with their ancestral lakes is to be recognised and provided for.

The management of lake weed within the Te Arawa Lakes forms a key part of this redress, and section 26 of the Te Arawa Lakes Settlement Act 2006 specifically sets out that Te Arawa are not responsible for lake weed management. Control work is primarily delivered by the Crown through Toitū Te Whenua/Te Arawa Lakes Trust,

with some support from local government. However, the current level of investment has been described as just being enough to ‘trim the hedges’, primarily maintaining swimming and boat access, rather than fully addressing the problem.

Lake weed has not traditionally been in the spotlight, meaning programmes have had to be built around available funding. This is in contrast to assessing what level of funding is required to control lake weed to a level that achieves full lake restoration - a key focus of this business case. The completed business case will determine the best options to address the four worst lake weeds in the Te Arawa Lakes, with the best return for investment.

3 The Business Case

Supported by Place Group, representatives of the partners have completed Phase 1 of this Business Case process which has included the development of a strategic case using Treasury’s five case better business case model. The purpose of the strategic case is to confirm whether:

- there is a compelling case for change to investigate further; that is, evidence confirms there is a problem with the way lake weed is currently managed, and the scale and urgency of the problem warrant a response;
- key stakeholders are aligned and behind the need to address an agreed problem; and
- agreement is forming on what a good outcome looks like and what benefits could be gained, before effort is spent on investigating solutions.

A summary of the strategic case is included in Attachment A to this report. It has been determined through this process that there is a strong case for changing the status quo. Not investing in change now will:

- Result in significantly higher social, economic, and environmental costs over time;
- Jeopardise the ability to restore Te Arawa Lakes to their natural state; and
- Diminish the benefits of existing investment into nutrient management.

The business case has the support of Crown Agency Toitū Te Whenua - Land Information New Zealand. Toitū Te Whenua invests in weed control within the Te Arawa Lakes working in partnership with Te Arawa Lakes Trust. However, Te Arawa Lakes Trust has indicated that there is some uncertainty around an ongoing level of funding from Toitū Te Whenua. This is a key risk for the lake weed programme and makes this business case all the more urgent.

4 Support sought from Strategy Group

Phase 1 of the business case (Strategic Case) has been completed, and the partners are ready to progress with Phase 2. This paper seeks that the Strategy Group support the partners continuing with the development of the business case through to the final stages of completion. The remaining four cases will explore:

- Economic case – does the investment offer value for money.
- Commercial case – is the investment viable.
- Financial case – is the investment affordable.
- Management case – is the investment achievable.

Undertaking this further work will enable the partners to consider various funding scenarios and potentially support a bid for central government funding to address

the lake weed problem in the Te Arawa Lakes. It will also support conversations with Toitū Te Whenua around continuing to prioritise investment into Te Arawa Lakes.

5. **Ngā Mahi Whai Ake Next Steps**

Subject to the Rotorua Te Arawa Lakes Strategy Group endorsement, the partners to the business case will continue to explore and develop potential options (including costs) to address the lake weed problems in Te Arawa Lakes via completion of the business case.

Tuhinga Tautoko Attachments

Attachment 1 - Lakeweed Problem A3 Strategic Case - Place Group Ltd [↓](#)

Effectively addressing the aquatic weed challenge in Rotorua Te Arawa Lakes

Current Status

Historic and current under-investment in lake weed management activities is resulting in the continued expansion and invasion of aquatic weed in Te Arawa lakes, negatively impacting the values which make these lakes nationally and internationally iconic.

Over the past several decades, targeted funding for nutrient management within the Te Arawa Lakes has successfully reduced nitrogen and phosphorus levels, resulting in corresponding improvements in water quality and clarity. However, recent studies have shown that contrary to popular belief, controlling eutrophication is not a successful strategy to reduce weed biomass, and improvements in lake water quality have created the ideal environment for lake weed to proliferate. This is a challenge that must be addressed.

- 4 of 5 of the worst submerged aquatic weeds are present in the Rotorua Te Arawa Lakes (egeria densa, lagarosiphon major, elodea canadensis, Ceratophyllum demersum (hornwort)).
- These species are notorious ‘ecosystem changers’ outcompeting native aquatic plants, and smothering native seed banks. They have continued to spread, with new incursions detected in the last 10 years. Figure 2 below graphically depicts the current condition of the Te Arawa Lakes.

Lake	Status	Date	LakeSPI %	Native Condition %	Invasive Impact %
Lake Okareka	High	2023-05-01	65.2%	56.7%	18.5%
Lake Okataina	High	2022-03-09	60.8%	57.3%	31.1%
Tikitapu/Blue Lake	High	2022-03-07	60.4%	60.0%	34.8%
Lake Okaro	High	2023-04-26	58.3%	46.4%	22.2%
Lake Rotoma	High	2023-05-02	51.6%	56.0%	47.4%
Lake Rotomahana	Moderate	2023-05-05	40.8%	45.3%	57.0%
Lake Rerewhakaaitu	Moderate	2023-05-04	33.2%	45.9%	79.3%
Lake Tarawera	Moderate	2022-03-08	30.8%	36.0%	78.5%
Lake Rotiti	Moderate	2023-05-03	24.8%	34.7%	86.7%
Lake Rotorua	Moderate	2023-04-28	22.4%	24.0%	83.0%
Lake Rotoehu	Poor	2023-05-02	16.9%	24.8%	90.4%

Fig. 2: LakeSPI indices - 2023. Lakes have been ranked in order from High - Poor condition based on the LakeSPI % Index which provides an overall measure of the lake's ecological condition. Note, comparative LakeSPI data is not available for Lakes Ngāpourī, Tutaeinanga and Ngāhewa.

- BOPRC, TALT, RLC and LINZ are working together to tackle the problem, but the current level of funding is inadequate to effectively address the challenge that is faced.
- Current level of investment by BOPRC, LINZ, RLC and TALT – is approx. **\$730k per annum**, equating to a combined level of **3.65M over the last 5 years** (excludes 200k for TALT cultural monitoring plan associated with diquat and endothall region wide resource consent). **This is enabling a ‘trimming the hedges approach’ and is not at a level to address the problem.**
- TALT have indicated that there is some uncertainty around an ongoing level of funding from LINZ. **This is a key risk to the Te Arawa Lakes.**
- There is a pressing need to secure additional investment to enable larger scale control operations and surveillance and monitoring activities to protect the values of the Te Arawa Lakes.

Issues and impacts of aquatic weeds

- Lake weeds are continuing to undermine investment to date into water quality improvements. Lakes weeds impact associated environmental, cultural, recreational, and economic values which water quality improvements were anticipated to address.
- Rotorua and its surrounds are widely regarded both domestically and internationally as a world-class destination and the cultural centre of New Zealand. The proliferation of lake weeds are risking our region’s image - Te Arawa Lakes are described by Destination Rotorua as ‘majestic’ and ‘sparkling’, conjuring images of clear weed free water. A pervading negative image has the potential to undermine historic investment in tourism infrastructure e.g. lakefront spas and accommodation, and also negatively impact future tourism and business opportunities.
- Not addressing the lake weed problem risks fulfilling the Te Arawa Settlement Act 2006, in terms of ensuring continued use and enjoyment and providing for the traditional relationship of Te Arawa with their ancestral lakes. Current level of control undertaken by LINZ is not yet at a level which enables Te Arawa to undertake cultural practices.
- There is potential for ongoing lake weed management costs to escalate to achieve the same results (baseline) if adequate investment is not timely.
- Lake weeds reduce the ability of native aquatic plants to provide essential ecosystem services. In heavily infested lakes, there has been complete collapse of native aquatic plants.
- There is a closing window to restore the Te Arawa lakes due to expansion of weed beds and burial of native seed banks.
- Whilst lake weeds are present, costs to remove lake weed from shorelines following storm events will increase, along with the associated amenity/odour impacts from rotting vegetation. Disposal of lakeweed is also problematic and costly as lake weed often has a high heavy metal content meaning it cannot be disposed of at landfills. It is expected that the intensity of weather events will increase with climate change.
- Lake weeds increase the risk to aquatic biodiversity and endemic aquatic plants which have a national threat status.

Not investing in change now will...

- Result in significantly higher social, economic, and environmental costs over time;
- Jeopardise the ability to restore Te Arawa Lakes to their natural state; and
- Diminish the benefits of existing investment into nutrient management.

Progress Achievable with Additional Investment

A case for change to address the lake weed challenge has been established through Phase 1 of a collaborative business case process involving BOPRC, RLC, and Te Arawa Lakes Trust (‘Effectively Addressing the Aquatic Weed Challenge in Rotorua Te Arawa Lakes’).

If we move decisively and invest wisely now to enable access to appropriate control tools and greater resourcing, there is potential to eliminate lake weed from the Te Arawa Lakes.

What is the strategic approach?

If additional investment is secured, by 2023 the objectives are to:

1. Improve the **effectiveness** of weed control in the Rotorua Te Arawa Lakes Catchment.
2. Meet relevant Te Arawa Treaty settlement obligations and **realise mana whenua aspirations** to restore the health of the Rotorua Te Arawa lakes.
3. Improve **recreational opportunities and amenity values** for visitors to the Te Arawa lakes by reducing the prevalence of lake weed.

Investment into more comprehensive and frequent weed control operations across the lakes would allow a two-pronged approach:

- A dedicated focus on one lake to demonstrate proof of concept to eradicate lake weed, and then rollout of this approach to other lakes.
- Enhanced and continued eradication and/or progressive containment operations for lake weed across all lakes and corresponding improvement in recreation, amenity, cultural, ecological, and economic values.

Potential Options

Options for addressing the lakeweed challenge range from maintaining the current state through to a comprehensive weed control programme across all lakes. Options will be considered across component programme activities covering:

- Direct control operations
- Surveillance and monitoring
- Research and development
- Pathway management activities
- Engagement, communication, and education
- Formalised programme management and governance
- Changes to policy and regulations to support the programme

Funding Scenarios

Increased funding will allow progression along the spectrum from current state to a comprehensive programme and will enable:

- Increasing levels of lake weed control at a greater proportion of lakes and more comprehensive surveillance of re-emerging and new lake weed populations.
- Better monitoring and data collection to inform trends and management in lake weed control.
- Long term research programme working on new management tools, techniques and strategies for lake weed management.
- Comprehensive coverage of ‘Check, Clean Dry’ facilities and all boat ramps/public access points and other pathway management measures to reduce spread of weeds between lakes and inter-region.
- Comprehensive engagement and education programme to increase social licence for control and support the prevention of spread of lake weed.
- Greater level of programme oversight and coordination with establishment of a dedicated, single focus organisation at the do-maximum end of the spectrum.
- Removal and/or reduction of potential policy and regulatory roadblocks to enable operational efficiencies.

Key benefits of increased investment

- Long term cost savings on weed control and management and more effective and efficient tools for lake weed control.
- Increase in cultural wellbeing and fulfilment of relevant treaty settlement obligations.
- Increased presence of native plants/biodiversity and improved ecological resilience.
- Increased number of people seeing the value in protecting the lakes.
- Growth in amenity use of the lakes - increased social/recreational benefit.
- Protection of Rotorua’s international image as an iconic destination.

Next Steps

The partners to this business case seek the support of RLSG to:

- Continue the development of the business case through to the final stages of completion, which includes exploration of options for delivery through the development of the economic, financial, commercial and management cases. This will enable the business case partners to consider various funding scenarios and potentially support a bid for central government funding to address the lake weed problem in the Te Arawa Lakes. It will also support conversations with Toitū Te Whenua around continuing to prioritise investment into Te Arawa Lakes.
- Support the business case partners to elevate the importance of the issues addressed in the business case with the relevant Crown agencies (our funding partners).



Pūrongo Ki: Report To:	Rotorua Te Arawa Lakes Strategy Group
Rā Hui: Meeting Date:	22 March 2024
Kaituhi Pūrongo: Report Writer:	Helen Creagh, Rotorua Catchments Manager
Kaiwhakamana Pūrongo: Report Authoriser:	Chris Ingle, General Manager, Integrated Catchments
Kaupapa: Purpose:	To provide the Strategy Group with the Mahere Mahi ā-tau 2024-2025 and the Purongo ā-ono Marama 2023-2024 for adoption. Also, to provide the Deed funded project Status Updates.

Mahere Mahi ā-tau (2024-2025), Purongo ā-ono Marama (2023-2024), Deed Funded Project Status Updates

Whakarāpopototanga Executive Summary

The Funding Deed and Programme Management Plan for the Rotorua Te Arawa Lakes Programme set out the requirements for programme management and reporting, including:

- regular updates on Programme progress to Strategy Group,
- the development of six-monthly and annual reports, and
- the approval of annual work programmes.

This report is prepared in order to meet the requirements of the Deed of Funding and Programme Management Plan by providing the Deed Funded Project Status Updates for the Group and also the Purongo ā-ono Marama 2023-2024 and Mahere Mahi ā-tau 2024-2025 for adoption.

Ngā tūtohutanga Recommendations

That the Rotorua Te Arawa Lakes Strategy Group:

- 1 Receives the report, Mahere Mahi ā-tau (2024-2025), Purongo ā-ono Marama (2023-2024), Deed Funded Project Status Updates;**
- 2 Adopts the Mahere Mahi ā-tau 2024-2025 and Purongo ā-ono Marama 2023-2024 for provision to the Ministry for the Environment, in accordance with the requirements of the Deed of Funding for the Programme;**
- 3 Agrees to defer the development of the Three-Year Plan for the Programme (2024-2025 – 2025-2027) until the recommendations of the 2023 review of Strategy Group are resolved.**

1. He Whakamārama Background

This report is prepared in order to meet the requirements of the Deed of Funding for the Programme by providing the Mahere Mahi ā-tau 2024-2025 (Annual Work Programme) and the Purongo ā-ono Marama 2023-2024 (Six Month Report) to the Strategy Group for their adoption. Following adoption by the Group, the documents will be forwarded to the Ministry for the Environment, as required by the Deed of Funding for the Programme.

It is noted that the Programme is also due for a Three-Year Plan to be adopted by Strategy Group in relation to Deed funded activities, for the period 2024-2025 – 2026-2027. Staff have deferred drafting this three-year plan until further direction is provided by Strategy Group, following their consideration of implementing the recommendations of the recent review led by Te Arawa Lakes Trust. Strategy Group support for this approach is also sought.

Also provided with this report are the Status Updates for each of the Deed Funded activities, as required by the Programme Management Plan reporting requirements.

2. Reports for Adoption

2.1 Purongo ā-ono Marama 2023-2024

Attached in Appendix One the Purongo ā-ono Marama is presented for adoption by the Strategy Group. It presents progress on Deed Funded activities so far for the 2023-2024 financial year, and also provides brief updates on non-Deed funded priorities.

This report is intended to meet the requirements of the Deed of Funding and a full and detailed Purongo ā-tau (Annual Report) will be provided at the end of the financial year.

2.2 Mahere Mahi ā-Tau 2024-2025

Attached in Appendix Two the Mahere Mahi ā-Tau 2024-2025 for the Programme is presented for adoption. The Deed of Funding requires that an Annual Work Programme is presented to the Ministry for the Environment in advance of the upcoming financial year, to secure funding in accordance with Schedule 2 of the Deed for work during the year.

This Mahere Mahi ā-tau seeks to secure funding for the 2024-2025 financial year to continue work on the Lake Rotorua Incentives Scheme and the constructed wetlands projects – contributing to the 50-tonne engineering solutions component of the Integrated Framework for achieving the sustainable nitrogen load to Lake Rotorua.

This Mahere Mahi ā-tau also requests that MFE progress changes to Schedule 2 of the Deed, as per agreements of the previous Minister for the Environment, to transfer \$10 million of funding from Bay of Plenty Regional Council to Rotorua Lakes Council, i.e., from the Lake Rotorua Incentives Scheme to the Lake Rotoiti Sewerage Reticulation Scheme. This recommendation is made on the basis that Rotorua Lakes Council have confirmed that a Lakes Restoration Rate will reimburse this funding to the Crown so it is available to the Incentives Scheme in later years of the Programme.

2.3 **Deed Funded Project Status Updates**

As part of the regular reporting to Strategy Group, and in accordance with the Programme Management Plan for the Programme, the Status Updates for the following Deed funded activities are provided in the appendices of this report also: the Lake Rotorua Incentives Scheme, Engineering Solutions (constructed wetlands), Low Nitrogen Land Use Fund, Tarawera Sewerage Scheme, Rotoiti Sewerage Scheme.

3. **Ngā Whakaarohanga Considerations**

3.1 **Ngā Mōrea me Ngā Whakangāwaritanga Risks and Mitigations**

The adoption of the Mahere Mahi ā-tau recommends that \$10 million is transferred in Schedule 2 of the Deed of Funding for the Programme from the Regional Council to Rotorua Lakes Council, i.e., from the Incentives Scheme to the Rotoiti Sewerage Reticulation Scheme. This recommendation is made on the basis of the commitments of the previous Minister for the Environment.

Rotorua Lakes Council have confirmed that their new Long-Term Plan has set a rate to recover the funding for the Incentives Scheme to be repaid to the Crown (the requirement of the agreement from the previous Minister). Therefore, staff believe that the risk to funding being available to secure 100 tonnes of nitrogen reduction from Lake Rotorua via the Incentives Scheme (required to meet the sustainable nitrogen load for Lake Rotorua by 2032) is mitigated.

3.2 **Huringa Āhuarangi Climate Change**

Mitigation			Adaptation	
Reduce GHG emissions	Produce GHG emissions	Sequester carbon	Anticipate climate change impacts	Respond to climate change impacts
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Ongoing adaptation by the Programme is necessary to respond to the impacts of climate change. The work undertaken by the Programme, particularly in terms of land use change is aimed at better positioning our community to adapt to and mitigate against the effects of climate change and the impact of land use on the lakes.

The Programme's Water Quality Technical Advisory Group and our Toihuarewa Waimāori also provide guidance in respect of mitigation and adaption and ensuring the Programme is adapting its work in accordance with new science.

3.3 **Ngā Pānga ki te Māori Implications for Māori**

The Rotorua Te Arawa Lakes Strategy Group is a post-settlement authority that helps to maintain and improve the Rotorua Te Arawa lakes and is also a permanent joint committee of the two councils. Te Arawa Lakes Trust representatives sit around the table (as well as TALT staff) and provide regular feedback on the implications for Māori of the programmes of work.

The recent review of the Strategy Group by Te Arawa Lakes Trust has recommended elevating the role of Te Arawa Lakes Trust in the leadership and delivery of the Programme and Strategy Group are considering how they wish to implement these recommendations.

3.4 **Ngā Pānga ā-Pūtea Financial Implications**

The recommendations of this report are consistent with both Councils' draft Long Term Plans 2024-2034.

4. **Ngā Mahi Whai Ake Next Steps**

Pūrongo a-tau for the 2021-2022 financial year will now be prepared in accordance with the new format which better reflects Te Ao Māori and was adopted last year. This report will cover a comprehensive review of the work of the Programme during the year, both deed and non-deed funded.

Tuhinga Tautoko Attachments

Attachment 1 - Final for Strategy Group - Mahere Mahi ā-tau 2024-2025 [↓](#)

Attachment 2 - Final for Strategy Group - Purongo ā-ono marama 2023-2024 [↓](#)

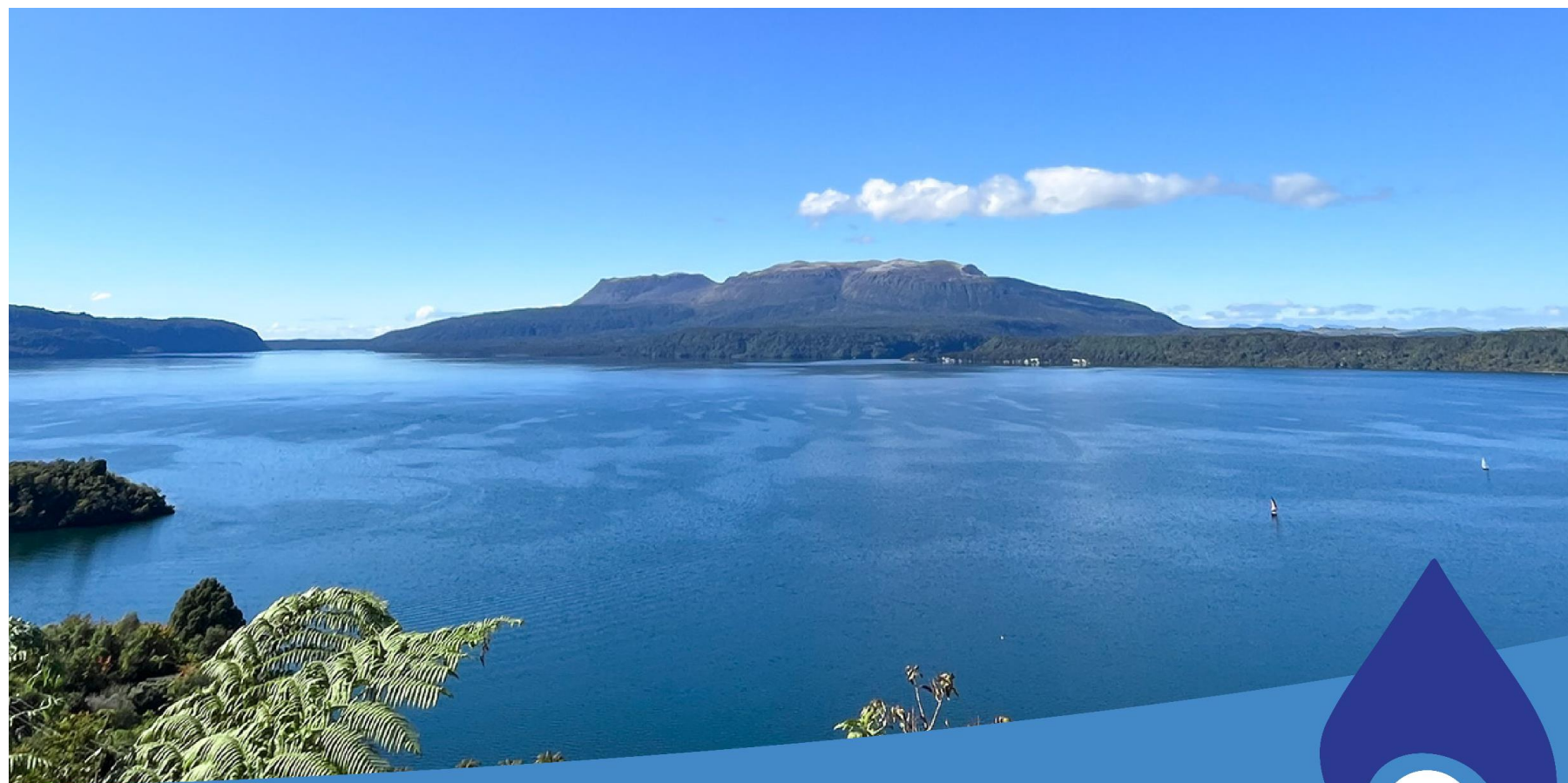
Attachment 3 - 50 Tonne Engineering Solutions - March 2024 Strategy Group Status Update [↓](#)

Attachment 4 - Low Nitrogen Land Use Fund - March 2024 Strategy Group Status Update [↓](#)

Attachment 5 - Rotoiti Wastewater Scheme - March 2024 Strategy Group Status Update [↓](#)

Attachment 6 - Incentives Scheme - March 2024 Strategy Group Status Update [↓](#)

Attachment 7 - Tarawera Sewerage Scheme - March 2024 Strategy Group Status Update [↓](#)




Mahere Mahi ā-tau

Annual Work Plan 2024-2025



**Rotorua
Te Arawa Lakes
Programme**



Rārangi take

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Wai

Purpose of annual work programme



Wai | Purpose of Annual Work Programme

The purpose of this Annual Work Plan is to outline the interventions planned for the 2024/2025 financial year for the Rotorua Te Arawa Lakes Programme (the Programme), as per the requirements of the Deed of Funding with the Crown for the Programme. That Deed requires that to secure funding for water quality interventions for the upcoming year, the Strategy Group submits a Mahere Mahi a-tau (Annual Work Programme) to them for approval, aligning with Schedule 2 of the Deed.

The Programme encompasses 12 Te Arawa lakes; four of these lakes have received funding from the Ministry for the Environment, as per the Deed of Funding Agreement between the Crown.

This plan will be submitted to the Minister for the Environment for formal approval of the Deed Funded interventions as required by the Deed of Funding Agreement. While the Minister only approves this Annual Plan in relation to the Deed Funded lakes, a summary of non-Deed funded activities is also included.

Water quality trends

The Lake Statistics dashboard below shows the water quality trends across the Te Arawa lakes in relation to their target Tropic Level Index, contact recreation attributes and other freshwater attributes. The Dashboard provides important context as to the State of the Environment across the Te Arawa lakes and the investment decision making in this Annual Work Plan.

It is important to note that the water quality of Lake Rotorua and Lake Rotoiti is currently managed to achieve the target Trophic Level Index through temporary or artificial means, i.e. phosphorous locking (alum dosing) and the Ōhau diversion wall.

Lake Statistics (Water quality attributes)

Lake	Trophic Level Index		National Policy Statement for Freshwater Management (NPS-FM) Lakes attributes				10 year trends				Contact recreational attributes		
	TLI 2022/23 (TLI Target)	TLI 3 year Avg	Total Nitrogen median	Total Phosphorus median	Chl-a- median	Chl-a Max	Total nitrogen	Total Phosphorus	Chl-a	Water Clarity	Blue-green health warning	Cyanobacteria biovolumes 2020-23	Swimming water quality - faecal ¹
Ōkāreka	3.0 (3.0)	3.1	B	A	B	A					N/A	N/A	Good
Okaro	4.5 (5.0)	4.6	C	B	C	C					Yes	C	Good
Ōkātaina	2.7 (2.6)	2.7	A	A	B	A					N/A	N/A	N/A
Rerewhakaaitu	3.6 (3.6)	3.3	B	A	B	C					N/A	N/A	Good
Rotoehu	4.3 (3.9)	4.3	A	B	B	B					Yes	C	Fair
Rotoiti	3.8 (3.5)	3.7	B/B	B/B	C/B	B/A					Yes	B	Good
Rotokakahi	3.6 (3.1)	3.5	B	B	B	A					N/A	N/A	N/A
Rotomā	2.5 (2.3)	2.5	A	A	A	A					N/A	N/A	Excellent
Rotomahana	3.9 (3.9)	3.7	B	B	B	B					N/A	N/A	N/A
Rotorua	4.2 (4.2)	4.3	B/B	B/B	C/C	C/B					Yes	A	Poor
Tarawera	2.9 (2.6)	2.8	A	B	A	A					No	N/A	Excellent
Tikitapu	2.8 (2.7)	2.9	B	A	B	A					N/A	N/A	Fair
*Italicised figures are based on Te Wairoa Stream monitoring and a three-parameter TLI (no Secchi disk).													
¹ NPS-FM Human contact attribute based on 95 percentile E.coli over the most recent five bathing seasons. The lowest (worst) grade is shown where lakes have more than one bathing site.													
+ Lake Tarawera is not routinely monitored, however ad-hoc samples collected in response to public concern, has resulted in health warnings in past seasons.													

What is the Trophic Level Index

The Trophic Level Index is a number used to indicate the health of lakes in New Zealand. As a general rule of thumb, the higher the number, the worse the water quality in the lake.

The number is calculated using four separate water quality measurements – total nitrogen, total phosphorous, water clarity and chlorophyll-a

National Policy Statement for Freshwater attributes

To protect ecosystem and human health, attributes are measured to help determine the extent to which specific values are provided for. There is a range of different physical, chemical, microbiological and ecological attributes, and one attribute may apply to more than one value.

Attributes are graded A-D (E), with the National Bottom Lines set for some attributes, ‘A’ indicated ecosystems are healthy and resilient, or low risk to human health; to ‘D’ aquatic communities are in persistent degraded state, or risk to human health from contact recreation is high.

Contact recreation

Bathing and contact recreation sites are monitored during Summer throughout the Rotorua Lakes, to inform the public when and where it is safe to interact with the water. Not all lakes or all bathing sites can be monitored so popular and culturally significant sites are prioritised. Sites can be graded from Poor to Excellent based on attribute statistics in the National Policy Statement for Freshwater (NPS-FM).

Cyanobacteria are monitored in lakes with a history of algal bloom activity. Health warnings are issued by Toi Te Ora based on the volume of potentially harmful cells in the water and sites are graded according to the NPS-FM.

A	Excellent
B	Good
C	Fair/Moderate
D	Poor

Lake Statistics (Ecological attributes)

Lake	Lake submerged Plant Index ¹				Kōura			Kākahi		Catfish	
					<div><div></div> Improving<div></div> Stable<div></div> Worsening</div>						
	LakeSPI	LakeSPI Native Index ²	LakeSPI Invasive Index ²	Invasive Submerged Plants Present	Abundance	Trend	Reason for change	Abundance	Trend	Abundance	Trend
Ōkāreka	High	B	B	d	Moderate		N/A	Present	N/A	Absent	N/A
Okaro	High	C	B	c	Absent	N/A	N/A	Absent	N/A	Absent	N/A
Ōkataina	High	B	C	d	Abundant		N/A	Present	N/A	Absent	N/A
Rerewhakaaitu	Moderate	C	C	b, d	Present		N/A	Present	N/A	Absent	N/A
Rotoehu	Poor	C	D	a, c, e	Present		Declining water quality	Moderate	N/A	Absent	N/A
Rotoiti	Moderate	C	C	a, b, c, d, e	Moderate		Catfish predation	Abundant		Abundant	
Rotokakahi	Moderate	C	C	c	Moderate		N/A	Abundant	N/A	Absent	N/A
Rotomā	High	B	C	d	Abundant		N/A	Abundant	N/A	Absent	N/A
Rotomahana	Moderate	C	C	a, b	Absent	N/A	N/A	Absent	N/A	Absent	N/A
Rotorua	Moderate	C	C	b, c, d	Moderate		Catfish predation	Abundant		Present	
Tarawera	Moderate	C	C	a, b, c, d, f	Abundant		Unknown	Abundant	N/A	Absent	N/A
Tikitapu	High	B	C	d	Present		White tail disease	Absent	N/A	Absent	N/A
¹ based on LakeSPI survey data collected between 2018 and 2023; data from Rotokakahi Mar-2018. ² the LakeSPI native and invasive indices refer to tables 11 and 12 in the NPS-FM. Invasive Submerged Plants: a) Ceratophyllum; b) Egeria; c) Elodea; d) Lagarosiphon; e) <i>Potamogeton crispus</i> ; f) <i>Ranunculus trichophyllus</i>											

Lake Submerged Plant Index (Lake SPI)

The Lake SPI programme monitors macrophytes (aquatic plants) which are used to classify the ecological condition of lakes. The ecological status of a lake can be characterised by the composition of native and invasive plants.

‘Lake SPI’ index is a synthesis of components from both the native and invasive impact conditions of a lake and provides an overall indication of lake condition. The higher the score, the better the condition.

Kōura and Kākahi monitoring

Kōura and Kākahi monitoring is carried out by Dr Ian Kusabs of Kusabs and Associates Ltd. Koura monitoring is undertaken on all the Rotorua Te Arawa Lakes.

Regular Kākahi monitoring surveys are undertaken in Lakes Rotorua and Rotoiti to monitor the long-term effects of lake restoration initiatives on Kākahi populations in the shallow littoral zone of these lakes.

Catfish monitoring

Catfish were first detected in Lake Rotoiti in March 2016 and in Lake Rotorua in December 2018. Surveys have been undertaken to detect their presence in the other lakes. So far they are limited to Lakes Rotorua and Rotoiti.

Lake SPI/Cultural/Catfish	
A	Excellent
B	Good
C	Fair/Moderate
D	Poor



Waiariki | Programme deliverables 2024/2025

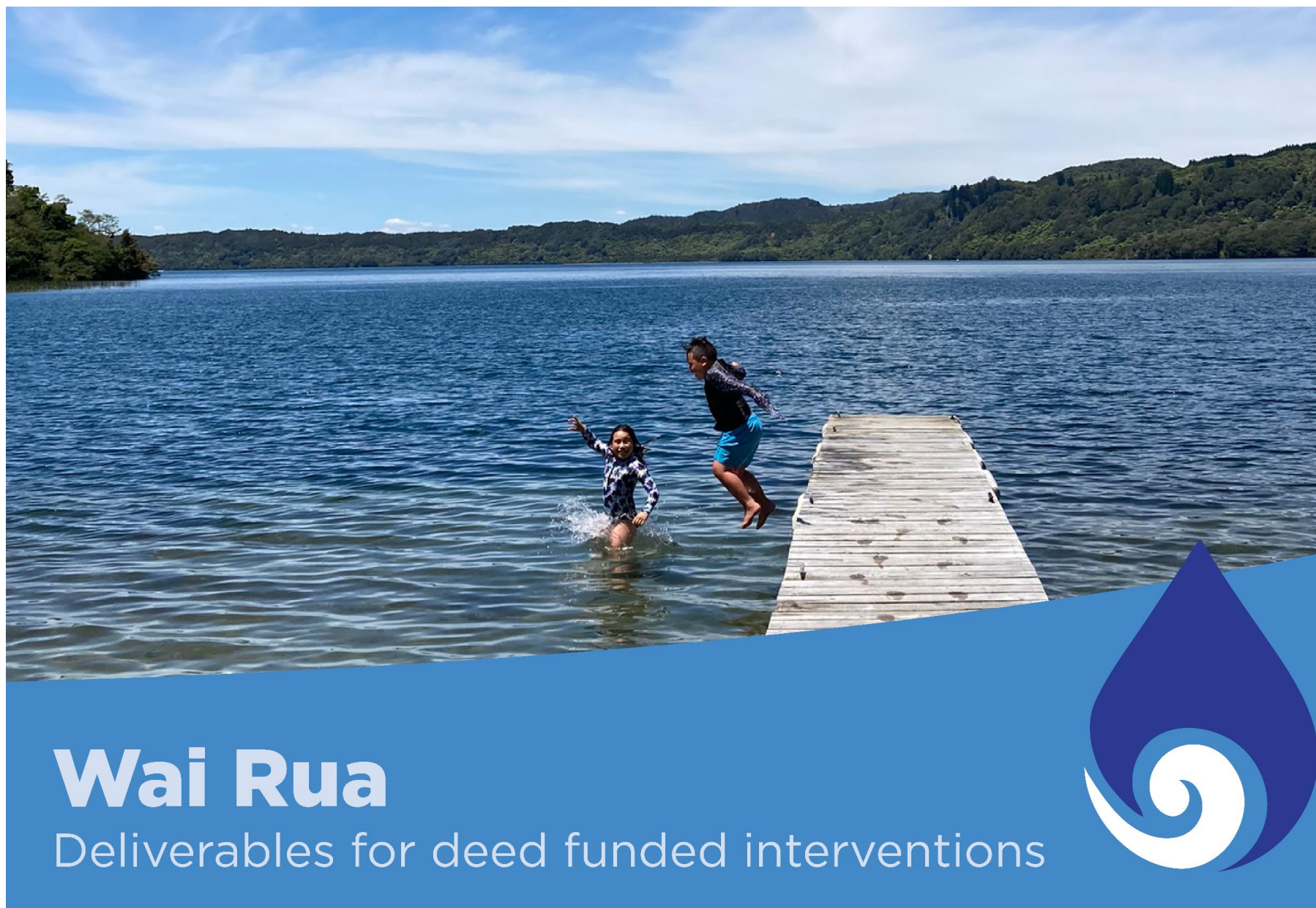
Deed-Funded activities are shown in **bold**.

Rotoehu
<ul style="list-style-type: none">Continue weed harvesting and out of catchment disposal of harvested weed, dependent on weed growth and economic viability (to be assessed seasonally).Monitor land use change agreements to ensure compliance.Assess viability of re-instating alum dosing as per new resource consent and as record lake levels decline.
Rotorua
<ul style="list-style-type: none">Continue phosphorous locking (alum dosing) for Lake Rotorua in accordance with resource consent.Continue to implement the Lake Rotorua Incentives Scheme to achieve the objectives of the Integrated Framework for Lake Rotorua. This includes entering into new agreements, implementing and monitoring existing agreements. The cumulative nitrogen target is 40 tonnes of nitrogen achieved by the Scheme by financial year end.Continue work on constructed wetlands to achieve the 50-tonne engineering solutions target as part of the Integrated Framework for Lake Rotorua. The aim for this year is to maintain the new wetland built in the Puarenga Catchment, build one further wetland (likely 31 Ngongotahā Road) and secure a further site for construction.Monitor and ensure compliance with the Lake Rotorua Nutrient Rules and Land Use Change agreements.Meet commitments under existing contracts for the Low Nitrogen Land Use Fund (Hedged Mānuka and Hazelnut trials).
Rotoiti
<ul style="list-style-type: none">Undertake inspections and maintenance of the Ōhau Wall as per the structural management plan and Regional Council’s Long Term Plan.Continue work to complete the Lake Rotoiti sewerage reticulation scheme.

Tarawera Catchments
<ul style="list-style-type: none">Continue Te Arawa Lakes Trust Tarawera Collective Impact Project.Complete Stage 2 of the Lake Tarawera sewerage reticulation scheme.Continue to support Tarawera Catchment acacia control on land adjacent to Isthmus Track and wilding pine control on mountain.Continue to support the farming community to implement their farm management plans that concentrate on good management practices in inner and outer Tarawera catchments through the Regional Council's grant funding.
All Lakes
<ul style="list-style-type: none">Continue to prepare a business case for further investment in lake weed management across the Te Arawa Lakes to support proposals to funding partners to expand this work.Continue koura monitoring programme on all 12 lakes.Continue operation of monitoring buoy network and public access to data.Work with Rotorua Lakes Council and Te Arawa Lakes Trust as required to remove lake weed for the purposes of public amenity.Continue to support landowners to go 'over and above' regulatory requirements in taking action to improve sustainable land use practice via Regional Council grant funding and Environmental Programmes, e.g. protection of wetlands retirement of flowpaths, seeps and marginal land.Continue to use eDNA techniques to establish whether catfish are present in a waterbody, across the Te Arawa Lakes.Continue coordination of volunteers setting nets for the catfish programme.Continue collaborative approach to new biosecurity risks including Golden Clam.

Assumptions

This Annual Work Programme is prepared on the assumption that the Long-Term Plans of both Councils (that allocate Council funding to interventions detailed here) will be adopted and that the Crown's commitment of funding to the Programme as per Schedule Two of the Deed of Funding continues. It is noted that as a result of the Te Arawa Lakes Trust 2023 review of the Strategy Group, and subsequent work to implement the recommendations of that review the priorities outlined in this Plan may change.



Wai Rua | Deliverables for deed funded interventions

Lake Rotorua

To meet community expectations for water quality in Lake Rotorua (as defined by the Bay of Plenty Regional Policy Statement and Regional Natural Resources Plan), nitrogen inputs must not exceed 435 tonne annually. This target is planned to be achieved by the delivery of the Integrated Framework by 2032. In the mean-time lake water quality is managed to achieve the target Trophic Level Index for the lake of 4.2, by dosing of aluminium sulphate which limits the phosphorous available for algae growth.

	Project	Description	Deliverables	Total Budget
BOPRC	Engineering Solutions	<p>The Programme has determined that constructed wetlands and restoration of ‘rural drain wetlands’ is the best way to deliver the remaining 50 tonne nitrogen target for engineering solutions, as part of the Integrated Framework. A project is now underway to deliver that.</p> <p>Work continues to build these wetlands and to secure further sites for future wetland developments.</p>	<p>This year we will:</p> <ol style="list-style-type: none"> Maintain the 9-ha rural drain wetland site in the Puarenga Catchment. Deliver one further wetland site, most likely as part of a housing development at 31 Ngongotahā Road. Work with partners to secure a further site for development. 	<p>\$2,000,000</p> <p>(\$1,000,000 Crown Funds)</p>
BOPRC	Lake Rotorua Incentives Scheme	<p>The Incentives Scheme will contribute 100 tonne of nitrogen reduction to Lake Rotorua by 2032. The Scheme purchases nitrogen from rural landowners that falls below their Nitrogen Discharge Allowance (as set in the Lake Rotorua Nutrient Management Rules). Generally, to take advantage of the Scheme landowners need to change their landuse.</p>	<ul style="list-style-type: none"> A cumulative total reduction of 40 tonnes of nitrogen by July 2025. Implement existing agreements and monitor them to ensure compliance. 	<p>\$1,600,000</p> <p>(\$800,000 Crown Funds)</p>
			Total Deed Funding Required	<p>\$3,600,000</p> <p>(\$1,800,000 Crown Funds)</p>

Lake Rotoiti

Lake Rotoiti has a target Trophic Level Index of 3.5 and a current Three Year Average Trophic Level Index of 3.7. There are three key Programme interventions to maintain the lake at or around its TLI, they are the Ōhau Wall, sewerage reticulation of lakeside properties in the catchment and rules regarding the intensification of land use in the catchment. The Ōhau Wall and rules are in place. Sewerage reticulation has been undertaken in two tranches, the first at the western end in the earlier years of the Programme and more recently at the eastern end from Curtis Road to Hinehopu.

This Annual Work Programme seeks to carry through commitments from the previous Minister for the Environment, for Rotorua Lakes Council to use funding currently allocated to Bay of Plenty Regional Council in Schedule 2 of the Deed of Funding (and allocated in the BOPRC’s Long Term Plan to the Lake Rotorua Incentives Scheme) to complete the Lake Rotoiti reticulation project this financial year as outlined below.

	Project	Description	Deliverables	Total Budget 2024/2025
RLC	Sewerage Reticulation - Curtis Road to Hinehopu	<p>Completion of onsite connections to the wastewater reticulation network at the eastern end of Lake Rotoiti between Hinehopu and Curtis Road. There are 424 connections in total to be made in this part of the reticulation scheme and this includes diversion from existing onsite drainage, pump units, alarm panels, onsite pressure pipeline, connection to boundary assembly, decommissioning of existing onsite septic tanks.</p> <p>Approximately three quarters of the onsite connections have been completed, this year the final quarter of connections will be completed.</p>	<p>This year we will complete installation of all onsite connections to the Rotoiti sewerage reticulation network.</p> <p>As per agreements with the previous Minister for the Environment, Rotorua Lakes Council intend to include a rate in their new Long-Term Plan 2024 -2034 to reimburse Deed funding for Regional Council’s Incentives Scheme for Lake Rotorua. Therefore, on confirmation of this rate, it is requested that changes are made to Schedule 2 of the Deed to transfer an additional \$10,000,000 to Rotorua Lakes Council to complete the Lake Rotoiti Reticulation Scheme which is paid back to the Crown in annual instalments.</p>	<p>\$10,000,000 (Crown Funds)</p>
			Total Deed Funding Required	\$10,000,000 (Crown Funds)



**Rotorua
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Pūrongo ā-ono marama

Six monthly report 2023/2024



**Rotorua
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July 2023 - December 2023 six monthly report


This report is prepared to meet the requirements of the Deed of Funding for the Rotorua Te Arawa Lakes Programme. The report provides a brief traffic light assessment of progress with the Deed funded activities (specifically the Deed of Funding for the Rotorua Te Arawa Lakes Programme), approved as part of the Mahere Mahi ā-tau and also a brief statement on progress with non-deed funded activities carried out by the partners across the Te Arawa lakes.

A comprehensive report is provided at financial year-end; the Purongo ā-tau provides a more comprehensive review of progress with all interventions, Deed and non-Deed funded. Its format can be tailored to meet the needs of the Strategy Group and the Ministry for the Environment, following the implementation of the recommendations of the Strategy Group review currently underway.

TLI results are not provided in this six-month report, as they are only able to be calculated with an annual set of data. However, by way of update on swimmability across the lakes, there has been algae blooms and health warnings across Lake Rotorua, across parts of Lake Rotoiti and on Lake Ōkaro over the 2023-2024 summer period. Lake Rotoehu has, for the first summer in a number of years, had excellent water quality and no health warning issued in the six-month period.

Lake Rotorua – Deed Funded Activities Update

Project	Mahere Mahi ā-tau targets	Achieved to date	Project status
Incentives Scheme	<ul style="list-style-type: none"> 40 TN cumulative total reduction by December 2023 43 TN cumulative total reduction by July 2024 Implement Existing Agreements 	<ul style="list-style-type: none"> 33 deals have been finalised to date which has removed 35.6 tonnes of nitrogen per year from the lake. All current agreements remain compliant. Another two deals are close to being finalised, which will take the cumulative total to 37TN. The Incentives Scheme has changed land use on 20% of the farming land in the Lake Rotorua catchment so far. <p>The Incentives Scheme is progressing with new interest, but slowly. The bulk of the remaining nitrogen available in the catchment is on large dairy farms. Some of these farms are interested in selling nitrogen to the Scheme but these are very long-term decisions reflecting generational change and will take a number of years to come to fruition. At this stage staff have indicated to the farming community the Scheme will be available until 2027. If 100 tonnes of nitrogen cannot be found by the Scheme it will need to be found by other land use change methods to achieve the sustainable load of nitrogen to the lake by 2032.</p>	
Engineering Solutions (constructed wetlands)	<ul style="list-style-type: none"> Deliver wetland pilot project in Puarenga catchment (note error in Mahere Mahi ā-tau - referred to Waiteti). Work with landowners and mana whenua to secure one identified priority site for construction and a further rural drain site. 	<p>There has been very good progress this year with the constructed wetland project. This project has the same objective as the Incentives Scheme, i.e. to remove nitrogen from the Lake Rotorua catchment permanently. Progress as follows:</p> <ul style="list-style-type: none"> The Puarenga catchment pilot project construction is consented and well underway – it will be completed by June 2024. A further rural drain wetland restoration site is going through a consenting process at the moment and we hope to 	

Project	Mahere Mahi ā-tau targets	Achieved to date	Project status
		commence construction at this site at 31 Ngongotahā Road this financial year, in partnership with the mana whenua. <ul style="list-style-type: none"> Work continues to secure one of the three identified priority sites for construction within the next three – five years. We are confident this can be achieved, in partnership with mana whenua and the site developer. Other potential constructed wetland sites are being actively pursued through various partnerships, including the Puarenga Reference Group. 	
Landowner Decision Making and Support	<ul style="list-style-type: none"> Close out Advice and Support Service for all remaining properties (10 ha – 40 ha) Meet obligations of existing contracts related to the Low Nitrogen Land Use Fund. 	<ul style="list-style-type: none"> Advice and Support Service on target to be wrapped up by June 2024, properties not compliant with the Lake Rotorua rules by then will be referred for Resource Management Act compliance. Remaining contractual commitments under Low Nitrogen Land Use Fund being met, including weed control, harvesting and oil extraction on hedged mānuka trial sites. 	

T = Tonne
 N = Nitrogen
 TLI = Trophic Level Index

Please refer to the Programme’s Purongo ā-tau for a comprehensive review of Programme progress.

Update on other activities

Lake Rotoehu

Lake levels remain high at Rotoehu so alum dosing and weed removal are not viable this year. Lake Rotoehu has remained free from algae blooms and Health Warnings over the summer period, which is unusual for this lake.

Lake Rotoiti

Parts of Lake Rotoiti have experienced algae blooms and subsequent health warnings over the 2023-2024 summer period.

In December, Greenfields Diving completed the installation of the trial repair on the Ōhau Wall. Greenfields shaped moulded plastic panels and trialled methods to fix these panels to the wall. At the same time we have our Toihuarewa Waimāori (Chair of Science Lakes and Freshwater), Deniz Ozcundacki undertaking modelling work as part of the conditions of our resource consent for the wall. This work considers how the wall contributes to water quality on Lake Rotoiti and will help quantify the effect of the corrosion on the water quality of Lake Rotoiti, informing a business case and options for repair.

There is currently \$1.5 million assigned to the repair of the wall in Year 2 of the Regional Council's draft Long Term Plan. If the trial is successful a business case, including option analysis, can be presented to Council to go ahead with this project as currently budgeted in Year 2 of the Long-Term Plan.

Work to complete connections to sewerage reticulation at Lake Rotoiti has continued.

Tarawera Catchments

The final action from the Tarawera Restoration Plan adopted by Strategy Group in 2015 is now well underway, Stage One of the Tarawera Reticulation Project has progressed well over the period and is due for completion during 2024. Stage 2 (onsite connections to the Scheme) is expected to commence in June 2024.

Te Arawa Lakes Trust continue the three-year programme of work on the Tarawera Collective Impact Project. This project was adopted by Strategy Group as the next steps, beyond the Tarawera Restoration Plan. The Collective Impact Project is the next steps for the 8 lakes in the complex and focusses on connecting people, at a grass roots level, to realise their aspirations for the Tarawera complex of lakes to drive change.

Lake Rotorua

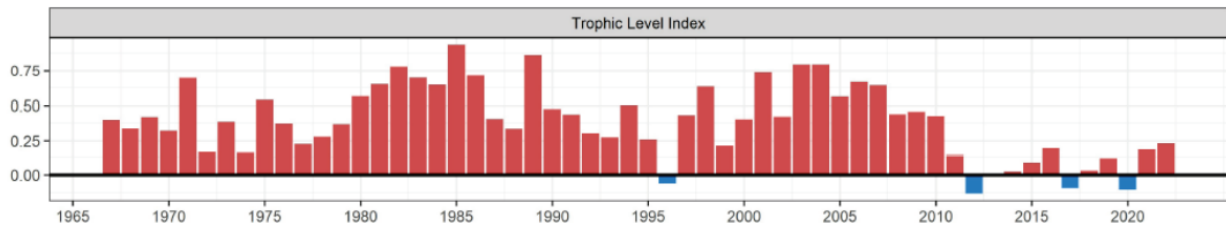
Alum dosing has continued, within newly consented limits, on Lake Rotorua this year - costing approximately \$1 million annually.

Also completed during the period was the Lake Rotorua Science Review. This review is a requirement of the Lake Rotorua Nutrient Rules (previously known as Plan Change 10) and enables us to gauge progress of the Programme of the long-term restoration on Lake Rotorua and is an opportunity to signal additional issues that may emerge along with possible opportunities that may also arise.

The Review drew upon a range of science experts producing 11 technical reports. Some key outcomes of the review include:

- Long-term water quality trends (including TLI and cyanobacteria biovolumes) appear to be improving (>20 years),
- Alum is effective in reducing phosphorus loads from the Utuhina and Puarenga inflows,
- The nitrogen load to land has reduced from 982 tonnes to 761 tonnes between 2017 and 2022,
- There is a need to better explain variability of lake water quality,
- There is a need to review internal nutrient loading and the fate of (dosed) alum in the lake,
- Ongoing support for catchment management activities is critical to the programme.

While Lake Rotorua continues to have algae blooms the graph below provides a summary of water quality (presented as TLI) that shows the incidence and magnitude of water quality since the 1960s, relative to the target TLI (shown here as 0). Since about 2010, when many of the key interventions were initiated, the target water quality has clearly improved and for a considerable portion of that time has met the lake TLI target of 4.2.



Financials

Year-to-date expenditure against each of the Deed Funded activities approved in the Mahere Mahi a-tau for the Programme, as per the Deed of Funding.

Rotorua Te Arawa Lakes Programme – Report B (Financial Progress Statement)								
Financial reports for the year ended 30 June 2024								
For the 6 months to 31 December 2023								
Interventions	Funding deed clause 5.4.1				5.4.2 (a) Note 1	5.4.2 (b) / 5.2.2 (d)		
	(A)	Total actual + forecast expenditure to year end 2023/24	(B)	(B-A)	(D)	(E)	(F)	(G)=(B-D)
	Council approved Annual Plan		Actual year to date expenditure	Variance to date over/(under) spend	Council funding excluding Crown grants (50% of B)	Approved work Programme 2023/24	Crown funding received to date	50% Crown funding applied to date
Lake Rotorua								
Advice and support	0	110	41	(69)	21	100	0	21
Engineering solutions	1,350	995	371	(624)	185	750	0	185
Land incentive payments	3,700	1,128	246	(883)	123	3,500	0	123
Low nitrogen landuse fund	0	55	16	(39)	8	50	0	8
Total Lake Rotorua	5,050	2,289	674	(1,615)	337	4,400	0	337
Total programme expenditure	5,050	2,289	674	(1,615)	337	4,400	0	337

5.4.2 (a) Note 1: Funding detail - Council

BOPRC reserves	337
BOPRC targeted rates	169
BOPRC general funding	169
Total funding detail - Council	674

Project Status Update



Item 8.4, Attachment 3

Project Overview	Date	Feb 2024	Due next	TBA	Sponsor		Chris Ingle	Project Manager	Rosemary Cross
	Name	50T Engineering Solutions	Reference						
	Objective	To remove 50 tN/yr from Lake Rotorua via Engineering Solutions			Progress Summary	To date 8 tN/yr has been removed through sewage reticulation of Rotorua lakeside communities.			
	Benefits	The removal of 50 tN/yr through Engineering Solutions will contribute towards the sustainable lake load of 435 tN/yr to Lake Rotorua to be achieved via the Integrated Framework approved by Strategy Group.				3 priority sites have been identified for constructed wetlands. Construction has commenced on the Winiata Rural Drain Wetland. Detailed design work is continuing for the 31 Ngongotahā Road Rural Drain Wetland Priority sites have been identified for the RLC WWTP polishing wetland			

Budget (\$)		Item	Discussion			Estimate	To date	Forecast	Variance
	Planned	Constructed and/or Rural Drain wetlands	The aim is to deliver two constructed or rural drain wetlands TFY.			\$750,000 TFY	\$511,992	\$731,992 TFY	\$18,000
	Variations								
Totals						\$750,000	\$511,992	\$731,992	\$18,000

Item 8.4, Attachment 3

Key Milestones / task achieved	What	Discussion	Planned	Actual	Signed off by
	Constructed wetlands	Engagement is continuing with the landowners/representatives of the priority sites.	Ongoing	Ongoing	
	Rural drain wetlands	Construction has commenced at the Winiata Rural Drain Wetland	Nov 2023	Jan 2024	
		Detailed design drawings are being finalized for the 31 Ngongotahā Rd Rural Drain Wetland	February 2024	TBA	
Key Milestones / tasks upcoming	What	Discussion		When	Responsible
	Landowner engagement	Continue engagement with landowners/representatives of priority sites		Ongoing	Rosemary Cross
	Rural Drain Wetlands	Continue baseline sampling		Ongoing	
		Complete wetland construction at Winiata Rural Drain Wetland		Feb 2024	
		Commence planting at the Winata Rural Drain Wetland		Mar 2024	
		Finalise design for the 31 Ngongotahā Rd Rural Drain Wetland		Feb 2024	
Issue / Risk realised	What	Discussion	Recommendation / Action		Responsible
	Wetland sites	Suitable sites may not be secured	Identify alternative sites and commence engagement.		Rosemary Cross
Decisions required	What	Discussion	Recommendation / Action		To be signed off by

Project Status Update



Item 8.4, Attachment 4

Project Overview	Date	22 February 2024	Due next	TBA	Sponsor	Chris Ingle	Project Manager	Rosemary Cross
	Name	Low N Land Use Fund	Reference		<div>Progress Summary</div> <p>Hedged Manuka Trial: The Owhatiura block was harvested in December with 513 kg of brust yielding 1800 mLs of oil (3.51mLs/kg). This exceeded last year's harvest from this block which yielded 2.42 mLs/kg). In an effort to minimise costs, sheep were being trialed for weed control at the Hamurana block unfortunately these were attacked by roaming dogs on their first night on the block.</p>			
	Objective	To trial low nitrogen leaching land uses in the Lake Rotorua Catchment.						
	Benefits	To provide alternative low nitrogen leaching alternatives for landowners affected by the Lake Rotorua Nutrient rules and better enable landowners to take up the Incentives Scheme.						

Budget (\$)		Item	Discussion	Estimate	To date	Forecast	Variance
	Planned	Hazelnut Trial	Continue irrigation scheduling as required.	\$5,000	\$5020	\$5,000	(\$20)
		Hedged Mānuka Trial	Organise harvest at Hamurana site; continue weed control at both sites as required.	\$45,000	\$24,679	\$45,000	(0)
	Vari-ations						
Totals				\$50,000	\$29,699	\$50,000	(\$20)

Key Milestones / tasks achieved	What	Discussion	When		Signed off by
			Planned	Actual	
	Hazelnut Trial	Undertake irrigation scheduling at Hazelnut site as required	Ongoing	Ongoing	Rosemary Cross
	Hedged Mānuka Trial	Brush harvested and oil distilled	Ongoing	Ongoing	Rosemary Cross

Key Milestones / tasks upcoming	What	Discussion	When	Responsible
	Hedged Mānuka Trial	Schedule next harvest	March 2024	Rosemary Cross
	Hazelnut Trial	Ccontinue irrigation scheduling as required	As required	Rosemary Cross

Issue / Risk realised	What	Discussion	Recommendation / Action	Responsible

Decisions required	What	Discussion	Recommendation / Action	To be signed off by

Project Status Update



Item 8.4, Attachment 5

Project Overview	Date	22 nd February 2024	Due next	TBA	Sponsor	Stavros Michael	Project Manager	Gerhard Mostert
	Name	Rotoiti Onsite Wastewater Treatment (OWTS)	Reference		Additional funding required for the completion of the Rotoehu section of works. Consisting of the installation of a pumping station and 110 OWTS Biolytix systems. Funding was cancelled by minister.			
	Objective	This Contract covers the supply, installation, operation and maintenance of onsite wastewater treatment systems (OWTS) to be installed in the Rotoiti Area of Benefit. The work site includes private property extending between a newly constructed Rotorua Lakes Council (RLC) Wastewater Pump Station, SH30 layby Rotoehu, to Curtis Road, Rotoiti. The Contract Works includes the supply and installation of approximately 424 No. residential OWTS including diversion from existing onsite drainage, pump units, alarm panels, onsite pressure pipeline, connection to boundary assembly (supplied and installed by others), decommissioning of existing onsite septic tanks and all required testing, commissioning and reinstatement.						
	Benefits	The East Rotoiti Sewerage Scheme (the Scheme) aims to protect the health of the waterways, the health of the public, and to provide an essential service to the community. The scheme also aligns with the vision of the Rotorua Te Arawa lakes Programme (a partnership between Te Arawa Lakes Trust, Rotorua Lakes Council and the Bay of Plenty Regional Council):						
					Progress Summary			

	<p>to preserve and protect the lakes for the use and enjoyment of present and future generations while recognising and providing for the traditional relationship of Te Arawa with their ancestral lakes’</p> <p>The project has come to fruition through a collaborative effort by Rotoiti/Rotomā Sewerage Steering Committee, Rotorua Lakes Council, Te Arawa Lakes Trust and Bay of Plenty Regional Council. The project has also been assisted through funding from the Ministry for the Environment and the Ministry of Health.</p>	
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Budget (\$)		Item	Discussion	Estimate	To date	Forecast	Variance
	Planned	Rotoiti- OWTS	Installations of onsite systems	\$ 14,396,927.45	\$ 12,302,819.41	\$ 376,610.18	\$ 2,094,108.04
	Variations	Rotoiti- Variations		\$ 1,531,636.04	\$ 2,787,652.74	\$ 100,000.00	-\$ 1,259,901.45
		Sediment Pond reinstatement	Storm water runoff from the Rotoiti WWTP access road is currently intercepted by a sediment retention pond (SRP) before entering Lake Rotoiti via a culvert under SH30. The SRP was installed for the construction phase of the WWTP and its access road. RLC will now decommission the SRT and install a new permanent outlet for the storm water runoff to Lake Rotoiti while returning public amenity and lay-by at the SRP ,location.	TBC			
		Totals			\$ 15,928,563.49	\$ 15,090,472.15	\$ 476,610.18

Item 8.4, Attachment 5

Key Milestones / tasks achieved	What	Discussion	When		Signed off by
			Planned	Actual	
	HNZ applications	149 of 152 has been approved to date.		N/A	HNZ
	Commercial installations	Caravan Park & Emmery Store. Last of the commercial sites		April 24	Gerhard Mostert
	O&M Manuals	Design, Printing and distribution of Manuals and stickers.		Ongoing	Gerhard Mostert
	Commissioning of systems	300 installations to date, now actively maintained under SP2		Feb 24	Gerhard Mostert
Key Milestones / tasks upcoming	What	Discussion	When	Responsible	
	Scheduling of further installations	36 properties has received their Building consents and is being scheduled for installation.	Feb 24	Gerhard Mostert	
	Sediment Pond reinstatement at Treatment Plant	Placed on hold till access road to Treatment plant slips can be resolved.		Gerhard Mostert, PdP, Fulton Hogan	
	Taurua Marae road upgrade	Physical works. Scheduled for later in the year. Part of agreement with local iwi.	March 24	Gerhard Mostert, PdP, Fulton Hogan	
	HNZ applications	Obtaining and applying for the balance of the 4 HNZ sites still outstanding.	Feb- April 24	Gerhard Mostert	
Issue / Risk realized	What	Discussion	Recommendation / Action		Responsible
	EOT required to accommodate balance of installations	Approval required for Extension of time till April 24	Extension of time granted		Eric Cawte, Gerhard Mostert
	Installation of OWTS systems	Target set at completing 325 installations by April 24			Gerhard Mostert, CIT, Fulton Hogan
Decisions required	What	Discussion	Recommendation / Action		To be signed off by
	Marae installation. Additional Biolytix systems required.	Te Waiiti Marae ahead of the Ngāti Pikiao Ahurei on 22 September 2023 a which is expected to see over 1500 daytime visitors to the Marae. The design has been developed to accommodate for the numerous facilities and to perform through periods where visitor numbers are high. Following the Ahurei, the			Gerhard Mostert

Item 8.4, Attachment 5

	understand how the system performed over this event. This data can then be related to any future Marae system designs and adopted accordingly.		



Project Status Update

Project Overview	Date	22 February 2024	Due next	TBA
	Name	Lake Rotorua Incentives Scheme	Reference	
	Objective	To remove 100 tonnes of nitrogen per year from Lake Rotorua through voluntary agreements with landowners who are prepared to reduce nitrogen leaching below what is required under the Lake Rotorua Nutrient Rules.		
	Benefits	The 100 tonnes from Incentives will contribute towards the sustainable lake load of 435 tN/yr to Lake Rotorua to be achieved by the Integrated Framework agreed by Strategy Group.		

Sponsor	Chris Ingle	Project Manager	Rosemary Cross
Progress Summary	33 deals have been finalised to date which has removed 35.6 tN/yr from the lake and resulted in over 4,500 ha of land use change. Another 2 deals are currently being finalised.		

Budget (\$)	Item	Discussion	Estimate	To date	Forecast	Variance
	Planned	Landowner incentives payments and supporting legal work.	\$3,500,000 TFY	\$252,383	\$1,100,000 TFY	(\$2,400,000)
	Variations					
Totals			\$3,500,000	\$252,383	\$1,100,000	(\$2,400,000)

Key Milestones / tasks achieved	What	Discussion	When		Signed off by
			Planned	Actual	
	Landowner Incentives deals	33 deals finalised to date; 2 are pending.			
	Area of Land Use Change	4518 ha			
	Area of trees planted	1480 ha			

Key Milestones / tasks upcoming	What	Discussion	When	Responsible
	Continue engagement with landowners with N available for sale.		Ongoing	Rosemary Cross
	Finalise pending deals		April 2024	Rosemary Cross

Issue / Risk realised	What	Discussion	Recommendation / Action	Responsible
	Lack of landowner uptake	Landowners who have the highest NDAs are not committing to land use change and sale of N to the Incentives Scheme. It should be noted that this is a voluntary scheme with a cap on price able to be paid.	Continue to engage with pipeline landowners with high nitrogen allocations.	Rosemary Cross

Decisions required	What	Discussion	Recommendation / Action	To be signed off by
	NA			



Project Status Update

Item 8.4, Attachment 7

Project Overview	Date	22 nd February 2024	Due next	tba	Sponsor		Stavros Michael	Project Manager	Gerhardus Mostert
	Name	Tarawera Sewerage Scheme	Reference	SA2017035	<div>Progress Summary</div> <p>Construction of Stage 1 began in May 2023. To date, a total of 14387 metres of pipe and 36 valves have been installed along Tarawera and Spencer Roads. Construction of Stage 1 is expected to be substantially complete in October 2024.</p> <p>An open tender process for Stage 2 construction was undertaken in June 2023 and a contract for this part of the works should be finalised shortly. Physical works for Stage 2 are expected be start June 2024.</p> <p>Final details of the system's three pump stations are being completed, but long significant long lead-time equipment for these are already on order.</p> <p>All works are being undertaken under the requirements of the agreed cultural monitoring processes and accidental discovery protocols, and new workers joining the team have been undertaking cultural inductions through Te Komiti Putaiki Tarawera.</p>				
	Objective	1. Construction of the reticulated sewerage scheme will service all existing 440 dwellings within the BOPRC Maintenance Zone, and provide 35% additional capacity for construction of future dwellings (550 dwellings in total). 2. Construction will be completed by October 2024.							
	Benefits	1. There will be no collapse in the lake's ecosystem into an algae-dominated state. 2. Present levels of recreational and tourism activity are maintained. 3. There will be no measurable human sewerage contamination of the lake water. 4. The current cultural affront to Tangata Whenua from human waste entering the lake will be removed.							

Budget (\$)		Item	Discussion	Estimate	To date	Forecast	Variance
	Planned						
		Construction of phase 1 (street & trunk main)	Stage 1 will install all street sewer piping and trunk main piping + Transfer Pump Stations	\$13,377,872.80	\$6,273,046.87	\$800,000.00	\$7,104,825
		Construction of phase 2 (on property)	Stage 2 will install all equipment on Tarawera properties and connect them to the street main.	\$1,100,000.00	N/A	N/A	N/A
	Variations						
Totals			\$14,477,872.80	\$6,273,046.87	\$800,000.00	\$7,104,825	

Key Milestones / tasks achieved	What	Discussion	When		Signed off by
			Planned	Actual	
Key Milestones / tasks achieved	Stage 2 open tender let to market	Contractor (DDL Contracting) appointed	June 2023	Jan 2024	G Mostert
	Rotokakahi Board risk meeting held and follow up report issued	Board members requested reassurance on the resilience of construction and environmental risk posed by the trunk main to Lake Rotokakahi.	n/a	June 2024	K White-Parsons
Key Milestones / tasks upcoming	What	Discussion		When	Responsible
	Comms to residents covering scheme costs and installation options	Comms release being prepared for issue in late September		Sept 2023	G Mostert
	Stage 1 construction complete			Oct 2024	G Mostert
	Stage 2 construction start			June 2024	G Mostert
Issue / Risk realised	What	Discussion	Recommendation / Action		Responsible
	Design of some elements of the scheme are still in design	Some design elements (some street piping and pump station components) are not yet fully defined due to the requirement for extensive ‘modelling’	Design schedule and construction schedule have been aligned to ensure the correct design information is available to Fulton Hogan at the right time		Stantec
Decisions required					
	What	Discussion	Recommendation / Action		To be signed off by
	Finalisation of Stage 2 contract	Signing of Contract documents with DDL.			Council/ DDL