

I hereby give notice that an Extraordinary meeting of the
Taharoa Domain Governance Committee

will be held on:

Date: Thursday 15 November 2018
Time: 2.00pm
Venue: Lake Waikare Centre, Taharoa Domain

Open Agenda

Membership

Chair: Ric Parore

Members: Alan Nesbit, Councillor Karen Joyce-Paki and Councillor Andrew Wade

Staff and Associates:

Parks and Recreation Manager, Financial Services Manager, Policy Planner, Policy Analyst,
Governance Advisor (Minute-taker)

Jason Marris
General Manager Governance, Strategy and Democracy

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Extraordinary meeting of Taharoa Domain Governance Committee**Thursday 15 November 2018****1 Opening****1.1 Karakia****1.2 Present****1.3 Apologies****1.4 Confirmation of Agenda**

The Committee to confirm the Agenda.

1.5 Conflict of Interest Declaration

Committee Members are reminded of the need to be vigilant to stand aside from decision-making when a conflict arises between their role as a Committee Member/Councillor and any private or other external interest they might have. It is also considered best practice for those members of the Executive Team attending the meeting to also signal any conflicts that they may have with an item before the Committee.

2 Deputations and Presentations

3 Confirmation of Minutes

3.1 Taharoa Domain Governance Committee minutes 16 August 2018

General Manager Governance, Strategy and Democracy 1606.17

Recommended

That the minutes of the Extraordinary meeting of the Taharoa Domain Governance Committee held on 16 August 2018 be confirmed as a true and correct record.

Taharoa Domain Governance Committee

Extraordinary meeting held

Date	Thursday 16 August 2018
Time	Meeting commenced at 2.03pm Meeting concluded at 4.18pm
Venue	Northern Wairoa War Memorial Hall, Dargaville
Status	Unconfirmed

Minutes

Membership

Chair: Councillor Andrew Wade

Members: Messrs Alan Nesbit and Ric Parore
Councillor Karen Joyce-Paki**Staff and Associates:**Parks and Recreation Manager, Financial Services Manager, Policy Planner,
Governance Advisor (Minute-taker)

Jason Marris
General Manager Governance, Strategy and Democracy

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**Minutes of the Extraordinary meeting of Taharoa Domain Governance Committee
Thursday 16 August 2018, Dargaville**

1 Opening

Chair Andrew Wade, in consultation with the Acting Chief Executive Curt Martin, cancelled the 08 August 2018 meeting of the Committee due to a district event (Kaipara District Council Standing Orders 8.13). Subsequently, Mayor Jason Smith called for this Extraordinary meeting of the Committee to be held on 16 August 2018 (Kaipara District Council Standing Orders 8.3 and Local Government Act 2002, Schedule 7, Clause 22).

1.1 Karakia

Iwi Relations Manager opened the meeting with a karakia.

1.2 Present

Councillors Andrew Wade (Chair) and Karen Joyce-Paki, Messrs Alan Nesbit and Ric Parore

In attendance	Designation	Item(s)
Donnick Mugutso	Acting General Manager Infrastructure	All
Hamish Watson	Parks and Recreation Manager	All
Andrew Howells	Domain Manager	All
Layne Wadsworth	Parks Contractor	All
Kathie Fletcher	Policy Manager	All
Paula Hansen	Policy Planner	All
Mark Schreurs	Policy Analyst	All
Francis Toko	Iwi Relations Manager	All
Markus Schwarzer	Financial Services Manager	1—6.2
Lisa Hong	Governance Advisor	All (minute-taker)

1.3 Apologies

Nil.

1.4 Confirmation of Agenda

Moved Parore/Nesbit

The Committee confirmed the Agenda.

Carried

1.5 Conflict of Interest Declaration

Nil.

2 Deputations and Presentations

2.1 Leon Parore, Provincial Growth Fund

Leon Parore spoke in the public forum.

3 Confirmation of Minutes

3.1 Taharoa Domain Governance Committee minutes 10 May 2018

General Manager Governance, Strategy and Democracy

1606.17

Moved Joyce-Paki/Nesbit

That the minutes of the Taharoa Domain Governance Committee meeting on 10 May 2018 be confirmed as a true and correct record.

Carried

4 Governance

4.1 Rotation of Chair 2018

Governance Advisor

4702.24.02

Motion 1 Joyce-Paki/Wade

[Secretarial Note: Motion 1 and Motion 2 to be read in conjunction with each other.]

That the Taharoa Domain Governance Committee:

- 1 *Receives the Governance Advisor's report 'Rotation of Chair 2018' dated 27 July 2018 and its attachment; and*
- 2 *Believes it has complied with the decision making provisions of the Local Government Act 2002 to the extent necessary in relation to this decision; and in accordance with the provision of s79 of the Act determines that it does not require further information prior to making a decision on this matter; and*
- 3 *Notes the new Taharoa Domain Governance Committee Terms of Reference as adopted by Council on 26 June 2018 (circulated as Attachment 1 to the aforementioned report); and*
- 4 *Adopts voting system B and agrees that in the event of a tie the candidate elected shall be resolved by lot.*

Carried

Motion 2 Nebit/Joyce-Paki

- 5 *Elects Ric Parore as Chair of the Taharoa Domain Governance Committee, until another Chair is elected at the first meeting of the Taharoa Domain Governance Committee after 01 July 2019.*

Carried

[Secretarial Note: At the request of Ric Parore, Councillor Andrew Wade consented to resume the role of Chair for the remainder of this meeting.]

5 Decision

5.1 Taharoa Domain Bylaw 2018 (Draft) and associated Statement of Proposal - recommend to Council to adopt for public consultation

Policy Planner 3216.0

Moved Nesbit/Wade

That the Taharoa Domain Governance Committee:

- 1 *Receives the Policy Planner's report 'Taharoa Domain Bylaw 2018 (Draft) and associated Statement of Proposal – recommend to Council to adopt for public consultation' dated 27 July 2018 and its attachments; and*
- 2 *Believes it has complied with the decision-making provisions of the Local Government Act 2002 to the extent necessary in relation to this decision; and in accordance with the provision of s79 of the Act determines that it does not require further information prior to making a decision on this matter; and*
- 3 *Determines that the proposed bylaw is required and is the most appropriate way of addressing the perceived problem and is the most appropriate form of bylaw; and*
- 4 *Recognises that Council's legal obligations under the Reserves Act to protect Ecological Values and to provide Recreational Safety for the users of Lake Waikare and Lake Kai Iwi are met; and*
- 5 *Recommends to Kaipara District Council to adopt the Taharoa Domain Bylaw 2018 (draft) and associated Statement of Proposal for public consultation, both documents circulated as Attachment 1 and Attachment 2 of the aforementioned report.*

Carried

5.2 Northland Regional Council's Navigation Safety Bylaw for Kai Iwi Lakes 2017 - Formal revocation of Taharoa Domain Governance Committee 08 February 2018 resolution

Governance Advisor 4702.24.02

Moved Joyce-Paki/Parore

That the Taharoa Domain Governance Committee:

- 1 *Receives the Governance Advisor's report 'Northland Regional Council's Navigation Safety Bylaw for Kai Iwi Lakes 2017 - Formal revocation of Taharoa Domain Governance Committee 08 February 2018 resolution' dated 27 July 2018; and*
- 2 *Believes it has complied with the decision-making provisions of the Local Government Act 2002 to the extent necessary in relation to this decision; and in accordance with the provision of s79 of the Act determines that it does not require further information prior to making a decision on this matter; and*

- 3 *Revokes the decision that the Taharoa Domain Governance Committee '[i]nstructs Kaipara District Council staff to make a submission to the Northland Regional Council's Navigation Safety Bylaw for Kai Iwi Lakes 2017 advocating for 200 metre speed restrictions'.*

Carried

6 Information

6.1 Taharoa Domain Operations Update: May 2018 to July 2018

Parks and Recreation Manager 4702.24.02.02

Moved Nesbit/Parore

That the Taharoa Domain Governance Committee receives the Parks and Recreation Manager's report 'Taharoa Domain Operations Update: May 2018-July 2018' dated 02 August 2018 and Attachments 1 and 2, and the information contained therein.

Carried

6.2 Financial report for 12-month period ending 30 June 2018

Financial Services Manager 4702.24.02.01

Moved Joyce-Paki/Parore

That the Taharoa Domain Governance Committee receives the Financial Services Manager's report 'Financial report for 12-month period ending 30 June 2018' and the information contained therein.

Carried

6.3 Kai Iwi Lakes Dune Lakes Galaxias Working Group update

Policy Analyst 4702.24.05

Moved Joyce-Paki/Nesbit

That the Taharoa Domain Governance Committee:

- 1 *Receives the Policy Analyst's report 'Kai Iwi Lakes Dune Lakes Galaxias Working Group update' dated 30 July 2018; and*
- 2 *Believes it has complied with the decision-making provisions of the Local Government Act 2002 to the extent necessary in relation to this decision; and in accordance with the provision of s79 of the Act determines that it does not require further information prior to making a decision on this matter; and*
- 3 *Receives the information in the above-mentioned report giving an update on the work of the Kai Iwi Lakes Dune Lakes Galaxias Working Group and its members; and*

- 4 *Directs the Chief Executive to report back to the Committee with a research protocol, including:*
- *conflict of interest and external organisations;*
 - *clear Committee approval process;*
 - *monitoring and reporting strategy;*
 - *potentially intrusive research techniques;*
 - *alternative funding for the trout diet study;*
 - *Terms of Reference for the Dune Lakes Galaxias Working Group; and*
 - *research programme, update on current projects, and funding streams.*

Carried

6.4 Alcohol Control Information

Policy Planner **3216/2018 Bylaw**

Moved **Joyce-Paki/Wade**

That the Taharoa Domain Governance Committee:

- 1 *Receives the Policy Planner's report 'Alcohol Control Information' dated 23 July 2018 and the information contained therein; and*
- 2 *Directs the Chief Executive to investigate using the Lake Waikare Centre for cultural and educational purposes.*

Carried

Closure

Iwi Relations Manager closed the meeting with a karakia.

Meeting closed at 4.18pm.

Confirmed

Chair

Kaipara District Council
Dargaville

4 Decision

File number: 3216.0 **Approved for agenda** ☐
Report to: Taharoa Domain Governance Committee
Meeting date: 15 November 2018
Subject: **Taharoa Domain Bylaw 2018 (Draft) and associated Statement of Proposal
- recommend to Council to adopt for public consultation - update**
Date of report: 01 November 2018
From: Paula Hansen, Policy Planner
Report purpose ☒ **Decision** ☐ **Information**
Assessment of significance ☒ **Significant** ☐ **Non-significant**

Summary

This report is to provide an update to the Taharoa Domain Governance Committee (the Committee) on progress of the proposed Taharoa Domain Bylaw.

A draft Bylaw and Statement of Proposal were resolved to be recommended to the Council for public consultation at the August 2018 Committee meeting. Feedback on these documents have been received by Elected Members through a Council briefing and Elected Members have provided some feedback. Additionally, the proposed bylaw has also undergone a legal review. The results of the legal review and Elected Member feedback has resulted in some minor changes to the bylaw and Statement of Proposal (SOP). The changes do not take away from the original intent of the bylaw presented at the August 2018 Committee meeting, rather they seek to provide clarity that supports what is trying to be achieved.

Attachments 1 and 2 of this report contain the draft Taharoa Domain Bylaw and accompanying SOP showing where changes have been made and the reason for those changes. A consultation and engagement plan has been included for information, **Attachment 3**.

While the Committee does not have the authority to put in place a bylaw, they can recommend to Council the need for one. If Council agrees, then Council can adopt a draft bylaw and associated SOP, to undergo a public consultation process.

The Local Government Act 2002 sets out the consultation process which is to be undertaken and decision-making process (s79-83). It is considered that the proposed bylaw will be of significant interest to the public (s76AA). This means that the Special Consultative Procedure (as modified by s86) should be used.

A consultation process will be undertaken if Council approves the need for a bylaw over the months of December 2018 and January 2019.

Recommendation

That the Taharoa Domain Governance Committee:

- 1 *Receives the Policy Planner's report 'Taharoa Domain Bylaw 2018 (Draft) and associated Statement of Proposal – recommend to Council to adopt for public consultation update' dated 01 November 2018; and*

- 2 *Believes it has complied with the decision-making provisions of the Local Government Act 2002 to the extent necessary in relation to this decision; and in accordance with the provision of s79 of the Act determines that it does not require further information prior to making a decision on this matter; and*
- 3 *Determines that the proposed bylaw (circulated as Attachment 1 of the aforementioned report) is required and is the most appropriate way of addressing the perceived problem and is the most appropriate form of bylaw; and*
- 4 *Recognises that Council's legal obligations under the Reserves Act to protect Ecological Values and to provide Recreational Safety for the users of Lake Waikare and Lake Kai Iwi are met; and*
- 5 *Delegates officers to correct minor typographical errors; and*
- 6 *Recommends that Kaipara District Council adopts the Taharoa Domain Bylaw 2018 (draft) and associated Statement of Proposal for public consultation as amended, both documents circulated as Attachment 1 and Attachment 2 of the aforementioned report.*

Reason for the recommendation

To implement the management direction provided by the RMP for the Domain. The Committee seeks Council's authority to create a bylaw for the Lakes, as best management practice, providing enforcement if required. Feedback and legal advice has meant that some changes have been made to the draft Bylaw and SOP presented at the August 2018 Committee meeting.

Reason for the report

This report seeks the Committee to receive and recommend that an amended draft Taharoa Domain Bylaw 2018 (Draft Bylaw) and associated Statement of Proposal (SOP), be presented to Council, to adopt and be publically consulted on at the 29 November 2018 Council meeting.

Background

At the Committee's meeting in August 2018 it was resolved to recommend to Council a proposed Bylaw and SOP to be adopted for public consultation. This was with a view to put a bylaw in place for the Taharoa Domain. The draft Bylaw and SOP was put to Elected Members for feedback at a Council briefing, also a legal review was sought. This has resulted in some wording changes. It is viewed that these changes do not take away from the original intent of the bylaw. Rather the changes proposed are to clarify how the bylaw fits with the Northland Regional Council Navigational Bylaw and the Northland Regional Council (NRC) role in the management of the Lakes with regards biosecurity and to provide better alignment with legislation.

Factors to consider

Community views

The proposed Draft Bylaw is subject to the Special Consultative Procedure which involves obtaining the views of the community. Mana Whenua and relevant Iwi representative bodies' views will need to be specifically obtained through this process.

The proposal will likely be of high public interest and is expected to receive submissions covering a variety of different views. A specific communications and engagement plan will need to be put in place to help guide people in terms of the scope of the Draft Bylaw and hence what can be submitted on by the community. Council will also need to be prepared for potentially negative comments on subject matter that is related to the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan (RMP) or other issues associated with the Domain, but are not related to the proposed bylaw. In these cases submissions will be considered to be out of scope. The consultation could include a day out at the Lakes to answer any questions people may have. This potentially could be run as a 'Have your say' event that may replace a formal Council hearing process.

Timing of consultation also needs to be considered. Traditionally people are not happy to consult on Council matters over the summer period and putting a new bylaw in place right before the Christmas/New Year period may also gather negative responses.

Policy implications

There are other Policy implications, related to the pending Mana Enhancing Agreement (MEA) with Te Roroa. This bylaw supports sentiments and core values expressed in the MEA. The Draft Bylaw seeks to give effect to the cultural values alongside ecological values stated within the RMP for Taharoa Domain, but not alter the RMP. The proposed bylaw is of such significance to warrant a full public process.

Financial implications

The main financial implications include staff time to implement, monitor and enforce the bylaw should it be adopted as a final. Efforts should be made to explore the empowerment of kaitiaki from Mana Whenua and Iwi representative bodies to potentially play a monitoring and education role as part of the bylaw's implementation.

Legal/delegation implications

The Reserves Act 1977, the Local Government Act 2002 and the New Zealand Bill of Rights Act 1990 have all been considered and no other legal implications have been noted.

Options

There are essentially three options:

Option A: Status Quo - Not have a bylaw;

Option B: Use another management mechanism e.g. use of monitoring and education.

Option C: Have a bylaw that:

- 1) restricts power-driven vessels on Lakes Waikare and Kai Iwi;
- 2) addresses inappropriate vehicle movements; and
- 3) supports biosecurity checks.

Option D: A combination of Options B and C.

Assessment of options

Option A, the status quo, does not provide for enforceable action to be taken nor does it compel people to do the right thing.

Option B, leaves very little enforcement options. Most alternative options, such as a policy, cannot be enforced, or environmental design could be costly. This may include use of education on activities that have negative impacts on the Lakes backed up with any monitoring or new research undertaken.

Option C introducing a bylaw will allow for enforcement action to occur in order to protect the environmental, archaeological and cultural values of the Domain.

Option D provides for a well-rounded approach to the implementation of the RMP. Compliance through education is considered to be important with monitoring to provide information to help inform future reviews. Having the legal ability to enforce a bylaw where education and information sharing has not been sufficient to ensure the outcomes are achieved.

Assessment of significance

The proposed bylaw is considered significant enough to undertake a full public process.

Recommended option

The recommended option is **Option D**.

Next step

Recommend to Council to adopt the proposed Taharoa Domain Bylaw 2018 and Statement of Proposal for public consultation.

Attachments

- Attachment 1 - Draft Bylaw
- Attachment 2 - Statement of Proposal
- Attachment 3 – Communication and Engagement Plan

Kaipara District Council

Taharoa Domain Bylaw 2018



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Relationship of this bylaw with other Council bylaws:

This bylaw does not negate the need to comply with provisions of other relevant Council bylaws. This bylaw should be read in conjunction with other Council bylaws, particularly Council's Consolidated General Bylaw which include rules around fires and litter.

Taharoa Domain Bylaw 2018

Pursuant to the Local Government Act 2002 and the Reserves Act 1997, the Kaipara District Council makes the following bylaw.

1 Title

This bylaw shall be cited and referred to as the Taharoa Domain Bylaw 2018.

2 Application

The provisions of this bylaw shall apply to the Taharoa Domain (the Domain) and activities on Lake Waikare and Lake Kai Iwi which are located within the Domain. Kaipara District Council does not govern, water-based activities on Lake Taharoa as these are governed by the Northland Regional Council's Kai Iwi Lakes Navigational Safety Bylaw under jurisdiction of Maritime Transport Act Enforcement Officers. Kaipara District Council however does govern land-based activities situated around Lake Taharoa under this bylaw.

<u>Which Council bylaw</u>	<u>Lake</u>	<u>Types of activities</u>
<u>Northland Regional Council Navigational Safety Bylaw (made under the Maritime Transport Act 1994)</u>	<u>Taharoa</u>	<u>Regulates, controls and manages all water based activities eg navigation matters, water skiing, boat use etcetera</u>
<u>Kaipara District Council Taharoa Domain Bylaw (made under the Reserves Act 1977 and the Local Government Act 2002)</u>	<u>Taharoa</u>	<u>Land based activities that surround the Lake, including parking, boat ramps and pre-launching biosecurity checks.</u>
	<u>Waikare and Kai Iwi</u>	<u>Control of water-based activities eg use of boats on the water and land-based activities that surround the Lake, including parking, boat ramps and pre-launching biosecurity checks.</u>

Explanatory Note: The Kaipara District Council Bylaw is to complement rather than duplicate the Northland Regional Council Navigational Bylaw for the Kai Iwi Lakes which is made under the Maritime Transport Act 1994, as opposed to the Reserves Act 1977.

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3 Objectives

The objectives of this bylaw are:

- (a) To protect the cultural, environmental, and social values, of Lake Waikare, Lake Kai Iwi and their surrounds within the Domain as set out in the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (the RMP).
- (b) To protect the safety of the recreational users on the Lakes and within the Domain.
- (c) To enable Kaipara District Council to implement the policies of the RMP.
- (d) To enable Kaipara District Council, as the administering body of the Domain, to meet its requirements under the Reserves Act 1977.
- (e) To provide for the authorising of boats for safety and research purposes, as per the RMP.

Explanation

The RMP contains aims that have been grouped into Management areas. The objectives relate to:

AIM 1: COLLABORATION: Local Government and tangata whenua will co-govern Kai Iwi lakes and inspire others to share in its care.

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AIM 2: CULTURAL: The relationships of tangata whenua and other peoples, their history, culture and traditions will be reflected and acknowledged in how Kai Iwi Lakes are developed and cared for.

AIM 3: ENVIRONMENTAL: Completing our knowledge about Kai Iwi Lakes will enable effective protection and enhancement of its natural environment and pristine waters.

AIM 4: RECREATION: A diverse range of recreational activities which are compatible with the cultural and ecological values of Kai Iwi Lakes, will be available for all visitors.

AIM 5: ECONOMIC DEVELOPMENT: Kai Iwi Lakes will be promoted and developed as an educational, scientific and tourist destination.

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AIM 6: RESOURCES: Kai Iwi Lakes and its promotion will be managed in a way that encourages a spectrum of resources that support its stewardship.

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Commented [PAH1]: Added rest of aims for completeness

Each of these aims are supported by their own objectives and actions. The bylaw should not be inconsistent with these objectives and actions in the RMP.

Explanatory Note: Cultural values are instruments by which Mana Whenua view, interpret and make sense of the world (Marsden 1988) and are derived from traditional Māori beliefs. The universal values and beliefs for the Lakes are connected to land, water, and air and are essential ingredients of life that are to be respected, cherished, and sustained. Everything within the cultural perspective has a life force, called mauri, and any degradation of natural resources is seen to diminish the mauri or life force, and affect the well-being of all people utilising the Lakes and their surrounds. Traditional Māori values contain the common Māori belief that all biophysical things including plants, trees, animals and human beings are supported by values and practices expressed as tapu (sacredness), mana (status), and mauri. Ongoing governance over and connection to the Lakes and the cultural heritage they hold allows Mana

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[Whenua to uphold these cultural values. SEE Historical Overview \(page 3\) of the Kai Iwi Lakes \(Taharoa Domain\) Reserve Management Plan 2016.](#)

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4 Commencement

This bylaw comes into force on << Date >> subject to the approval by the Minister of Conservation pursuant to s108 of the Reserves Act 1988 or on such later date as that approval may be obtained.

5 Interpretation

(1) In this bylaw, unless the context otherwise requires:

<i>the Act</i>	means the Reserves Act 1977.
<i>Council</i>	means the Kaipara District Council.
<i>the Domain</i>	means the Taharoa Domain.
<i>Ecological values</i>	means those values that contribute to the natural ecology of the Lakes and surrounding Domain and is noted within supporting documentation to the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP).
<i>Environmental Values</i>	means the environmental values highlighted within the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP) and supporting documentation to this RMP.
<i>Event</i>	means an organised temporary activity that takes place on one or more days including an organised competition, gathering, parade, protest, multi-venue sports event of a significant scale, fun run, marathon, duathlon or triathlon. For the purposes of this bylaw, sports practice or training is not an event.
<i>the Lakes</i>	means Lake Taharoa, Lake Waikare and Lake Kai Iwi.
<i>the Reserve Management Plan OR the RMP</i>	means the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP).
<i>Management operation</i>	means an activity considered necessary for the management of the reserve as determined by Council.
<i>Maritime Enforcement Officer</i>	means a person appointed as an Enforcement Officer under s33G of the Maritime Transport Act 1994.
<i>Officer</i>	means <ul style="list-style-type: none"> a) any ranger or constable; and b) any officer or employee of the Council who is authorised to exercise the powers of an Officer under Part 5 of the Act.

<i>Power-driven vessel</i>	means any vessel propelled by machinery.
<i>the Reserve</i>	means Taharoa Domain (a recreation reserve subject to the Reserves Act 1977).
<i>Shore</i>	for the purpose of this bylaw means the land between ordinary high- and low-water marks of the Lakes.
<i>Specifically authorised</i>	means permission is provided in writing by an Officer of the Council as the administering body of the Reserve. Including any conditions which they may set.
<i>Vessel</i>	means every description of a ship, boat or a craft used in navigation on the water, whether or not it has any means of propulsion and includes a: <ul style="list-style-type: none"> (a) seaplane while on the surface of the water; (b) personal watercraft (jet ski); (c) raft; (d) paddle craft; or (e) any board used for board sports.

- (2) Explanatory notes are for information only and do not form part of this bylaw.

6 Relationship to other Council bylaws

This bylaw does not negate the need to comply with provisions of other relevant Council bylaws. This bylaw should be read in conjunction with other Council Bylaws, particularly Council's Consolidated General Bylaw which include rules around fires and litter.

7 Use of power-driven vessels

No person may operate a power-driven vessel on Lake Waikare or Lake Kai Iwi unless the power-driven vessel has been specifically authorised under clause 11 as a:

- (a) safety vessel for an event; or
- (b) vessel for scientific and research purposes; or
- (c) vessel for management operations.

8 Use of boatramps

- (1) All power-driven vessels [and other vessels that require launching from a trailer](#) must use the boatramp designated on the Map in Schedule A to enter Lake Taharoa. Power-driven vessels may not enter Lake Taharoa at any other place.
- (2) Use of power-driven vessels entering Lake Waikare is restricted. Power-driven vessels that have been specifically authorised as a safety vessel for events, or for scientific and research purposes or for management operations, in accordance with clause 12 below, may only enter the Lake subject to the following conditions:

- (a) Only the designated boat ramp at Lake Waikare is used (refer to Map A for boat ramp location); and
- (b) that any directions given by an Officer are followed.

No other power-driven vessels may enter Lake Waikare.

- (3) All other vessels may enter Lake Waikare at the designated boat ramp, or at any other place around the Lake, provided that the vessel does not pose a biosecurity risk and that no vehicle or trailer is driven on or across the shore (refer to Map A for boat ramp location).
- (4) No person shall move any vehicle on any boat ramp at a speed exceeding 5km.
- (5) No person shall leave any vessel trailer or motor vehicle on or near any boat ramp so as to obstruct the safe and reasonable use of the boat ramp by any other person.
- (6) No person shall launch and use any boat trailer other than in accordance with the requirements of this bylaw.
- (7) The Taharoa Domain Manager or Council's Chief Executive may make rules for the use of the boat ramps at the Taharoa Domain for safety reasons.
- (8) An Officer may refuse a vessel or power-driven vessel access to the Lakes if the owner or master refuses to undertake a biosecurity check upon request.

Explanatory Note: Bio-security checks will be undertaken by the Northland Regional Council, the bylaw helps facilitate this process and promote the continual health of the Lakes. All vessels or power-driven vessels may be required to undertake the 'check, clean and dry' process to their vessel or power-driven vessel. Vessels that do not require launching from a boat ramp may still be required to undertake the 'check, clean and dry' process.

9 Vehicle movements and parking

- (1) No vehicle, other than an emergency vehicle, shall be driven on or along the shore except at the designated boat ramps.
- (2) Vehicles must not be driven anywhere in the Reserve other than on a formed road unless:
 - (a) It is within parking areas shown on the Map in Schedule A of this bylaw; or
 - (b) Directed by an Officer.
- (3) Vehicles can park on any parking area shown on the Map in Schedule A or within dedicated parking areas in the confines of either of the two camp grounds within the Reserve.
- (4) Designated drop-off zones as shown on the Map in Schedule A must be used to drop off people and equipment or other items. No vehicle (or trailer) shall be parked for more than 10 minutes in any drop-off zone next to a designated boat ramp.
- (5) An Officer may set aside an area for parking, or close a parking area, or declare an area to be a drop-off zone for the purposes of this bylaw.
- (6) An Officer may set aside an appropriate area to allow for biosecurity checks to be undertaken within the Reserve.

Commented [PAH2]: This is to clarify who will undertake the biosecurity checks and what maybe required if something is found on a vessel or power-driven vessel.

10 Powers of Council or any Officer

- (1) The Council or any Officer may close a boat ramp from time to time when considered necessary to protect the ecological values of the Lakes or for reasons of public safety and no person shall at this time use the boat ramp(s) without the consent of Council or an Officer.
- (2) The Council or any Officer may refuse vessel access to the Lakes if the owner or master refuses to undertake a biosecurity check upon request.
- (3) Where any vessel or power-driven vessel (or vessel trailer or motor vehicle) is on the Reserve, or is being used on the Reserve, in a manner contrary to this bylaw, and the owner or master of such vessel or vehicle does not comply when requested to do so or cannot be readily located, an Officer may authorise the removal of the vessel or vehicle to another place of reasonable safety, provided that he or she has first advised the person in possession (if any) of that vessel or vehicle.

Explanatory Notes: Relevant enforcement powers in Part 5 of the Reserves Act 1977 apply to this Bylaw. In particular:

Section 93(1) of the Reserves Act states, "Any officer may summarily interfere to prevent any actual or attempted breach of this Act or of any regulation or bylaw thereunder, and he or she may require any person found offending to desist from the offence. If any person when so required continues the offence, he or she commits a further offence against this Act."

Section 94(2)(b) of Reserves Act authorises an officer to request a person to remove an "illegal" vehicle or boat from the reserve, and it is an offence to fail or refuse to do so when requested.

In addition, the seizure and impounding provisions in sections 164 to 167 of the Local Government Act 2002 can be used in relation to breaches of this bylaw.

11 Specific authorisation under this bylaw

- (1) Specific authorisation under this bylaw is required for the use of a power-driven vessel on Lake Waikare and Lake Kai Iwi and shall be given only for a safety-vessel for an event, or a vessel for scientific and research purpose or a vessel for management operations.
- (2) Any request for authorisation under this section shall be made in writing to Council at least 20 working days prior to the event, or when any scientific or management activities are proposed to occur.
- (3) Any such authorisation may be subject to such terms and conditions as the Officer giving permission thinks fit.

12 Offence and penalty

Every person who contravenes this bylaw commits an offence and is liable to the penalty set out in s104 of the Reserves Act 1977.

To be added once approved.

The Bylaw was made by the Kaipara District Council by Special Consultative Procedure and confirmed at a meeting of Council held on

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This Bylaw was approved by the Minister of Conservation on ... pursuant to Section 108 of the Reserves Act 1977.

Schedule A – Map

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Kaipara District Council

Statement of Proposal

Taharoa Domain Bylaw 2018



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Statement of Proposal

1 Executive summary

Taharoa Domain is a 538 hectare recreation reserve vested in Kaipara District Council (Council/KDC). The Domain features three lakes: Lake Taharoa, Lake Waikare and Lake Kai Iwi (the Lakes). The Lakes are a popular destination for a range of recreational activities and also recognised by NIWA for their ecological and water quality values. The recreational use of the Lakes is growing and anticipated to continue to do so. Council, as the administering body of the reserve, has an obligation under the Reserves Act 1977 to ensure the management of the reserve reflects the protection of the reserve's values.

Kaipara District Council undertook a review of the Taharoa Domain Reserve Management Plan (January 2002) in 2015 and adopted a new Reserves Management Plan in September 2016. The Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan (2016) (the RMP) restricts the use of powerboats (power-driven vessels) specifically on Lake Waikare, unless authorised for safety for events, scientific and research purposes, or for management operations. The RMP allows only one boat ramp into Lake Taharoa and one for Lake Waikare but does not allow any for Lake Kai Iwi. The proposed bylaw has been created to implement the RMP policy objectives.

The Northland Regional Council (NRC) has a Navigational Bylaw that manages the water-based activities on Lake Taharoa are not covered by this bylaw.

Cultural values – iwi relationship

Owing to a close, long standing relationship with the Lakes and surrounding land, Mana Whenua regard them as a taonga and important food source. Te Roroa, and Te Kuihi and their associated whanau, and hapu have lived around the Lakes, fishing and carrying out other customary practices there, such as burying their dead. Two urupa are identified around the Lakes and a pa site overlooks Lake Kai Iwi from just outside the legal boundaries of the reserve. Mana Whenua and Tangata Whenua's long standing relationship with Kai Iwi Lakes and the wider surrounding area has been varied and ongoing. This status was recognised in a Treaty of Waitangi claim that included land embodied in Kai Iwi Lakes. In numerous places in its report The Waitangi Tribunal recognised that the Kai Iwi Lakes were, and still are, an essential mahinga kai for Te Roroa.

The Committee seeks, through the RMP, to manage Kai Iwi Lakes for the future in a way that respects the past, as well as reflects the wishes of present generations. Part of respecting the past is to honour the vision for the Lakes that has been inherited from Te Roroa, Te Kuihi and Parore Te Awha – that the Lakes are open to all to enjoy, that no one has exclusive use, and that no use should compromise the pristine nature of the place and its enjoyment by others. Acknowledging the mana whenua status of Te Roroa and Te Kuihi also reflects this.

An aim within the RMP is that the relationships of "Tangata Whenua and other peoples, their history, culture and traditions will be reflected and acknowledged in how Kai Iwi Lakes is developed and cared for".

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Ecological values

The Lakes have been identified as having high ecological significance in the Department of Conservation's (DOC) Protected Natural Areas Programme, with four ecological units in total identified for protection. Combined the Lakes have 60 Ha of land environments that are priority for protecting rare and threatened native biodiversity. All three Lakes have been identified by NIWA as having 'Outstanding' native biodiversity value, which means they are nationally important, containing a diverse indigenous biota with sustainable populations of endangered species. In 2010, the three Lakes were all ranked in the top 70 for ecological value of 255 Northland wetlands and in the top 20 for specifically lake type wetlands. All three Lakes were classed as having 'Excellent' ecological condition in 2005 and 2007 based on their submerged plant communities (LakeSPI), however, only Taharoa was excellent in 2011, with both Waikare and Kai Iwi deteriorated to having 'high' ecological condition. Six native fish species in total have been recorded from the three Lakes. The endangered dune lake galaxias (DLG) is the most significant, as it is only found in the Kai Iwi Lakes. Formerly present in all three Lakes, it is now apparently confined to Lakes Waikare and Taharoa. At least 15 different species of water birds have been recorded on the Kai Iwi Lakes in the past, including species that are regionally and nationally significant.¹ Lakes Taharoa, Waikare and Kai Iwi are all ranked as outstanding by NIWA in their Northern Lakes Ecological Status Report 2012. Individually they each have their separate characteristics, however collectively they form what is a unique and outstanding natural environment. These closely situated lakes are some of the most pristine dune lakes in Northland. The three lakes are classified as window dune lakes (Timms, 1982), meaning they sit within the water table and are fed by both rainfall, springs and overland flows. There is a possibility that Lake Kai Iwi is a Perched dune lake, sitting above the water table.²

Between them, the Lakes support 27 native plant species, including four rare natives.³ At least 35 indigenous aquatic plants have been recorded in the lakes over the last 30 years, many of which are nationally or regionally significant.⁴

Invertebrates are of interest in lake systems as indicators of lake health. They are generally very sensitive to poor water quality. In the case of these Lakes, the presence of koura/kewai in Waikare and Taharoa is a sign of the excellent water quality of these lakes as koura/kewai cannot tolerate less than clean water. Likewise, the Diptera midge, Ceratopogonidae in Lake Kai Iwi. These are signs of good lake health and mauri. The relative age of the Kai Iwi Lakes has allowed the DLG fish species to diverge genetically and morphologically. Other species such as koura/kewai (freshwater crayfish) are distinct in their morphology for the same reason. DLG are now locally extinct in Lake Kai Iwi where they were present in the past.⁵

Water quality sampling occurs quarterly in February, May, August and November. The NRC/NIWA ecological surveys will continue every five years with weed surveillance annually. NRC is undertaking an aggressive programme of catchment weed management at the Lakes, including wilding pine and nitrogen fixing weeds such as brush wattle and gorse.⁶

¹<https://www.kaipara.govt.nz/site/kaiparadistrictcouncil/files/pdf/TDGC/NRC%20Outstanding%20Waterbodies%20KI%20Lakes%2020130219.pdf>

² <https://www.nrc.govt.nz/media/9537/kaiiwi-lakes-management-plan-website.pdf>

³ Ibid

⁴ Supra n.1

⁵ Ibid

⁶ Ibid

Economic Values

Taharoa Domain is an exceptional place, boasting a fascinating cultural history, outstanding landscape values, a fast recovering ecology and water quality that is amongst the highest of any dune lakes in New Zealand. Collectively these characteristics give the Domain a distinctive identity that is unmatched elsewhere in the country and helps to build Kaipara's economy.

The Domain is a much loved destination for day visitors and campers, with many families having a relationship with the place that goes back to the early times of its formation as a reserve. It is not uncommon for camping groups to consist of three generations staying together.

An aim of the RMP is that the Lakes will be promoted and developed as an educational, scientific and tourist destination. Promotion will therefore be managed in a way that encourages a spectrum of resources that support its stewardship. Economic development objectives recognise the need to increase revenues from sources other than Council and to encourage sponsorship and partnerships which contribute resources in cash and/or kind. The camp ground is being developed and managed to achieve improved revenue.

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2 Statutory requirements

Council has the ability to put in place a bylaw to give effect to an RMP under the Reserves Act 1977.

2.1 Reserves Act 1977

The relevant parts of s106 of the Reserves Act 1977 allows the administering body (subject to the approval by the Minister of Conservation) of a reserve to make bylaws for the provision of:

- The management, safety, preservation and use of the reserve or any part thereof and the preservation of the flora and fauna and the scenic, historic, archaeological, biological, geological, or other scientific or natural features therein, and for the preservation of the natural environment;
- Prescribing the conditions on which persons shall have access to or be excluded from any reserve or any part of a reserve, or on which persons may use any facility (including any building) in a reserve, and fixing charges for the admission of persons to any part of a reserve and for the use of any such facility;
- Regulating the times of admission thereto and exclusion therefrom of persons, horses, dogs, or other animals, and vehicles or boats or aircraft or hovercraft of any description;
- The control of all persons, horses, dogs, and other animals, and vehicles or boats or aircraft or hovercraft of any description using or frequenting a reserve;
- Prescribing conditions on which persons may be permitted to enter and remain on any wilderness area within a reserve;
- Generally regulating the use of a reserve, and providing for the preservation of order therein, the prevention of any nuisance therein, and for the safety of people using the reserve.

Section 107(a) of the Reserves Act 1977 states that the procedure for making bylaws is in the same manner as that in which the local authority is authorised by law to make bylaws (as outlined below).

2.2 Local Government Act 2002

Kaipara District Council is authorised to make bylaws under the Local Government Act (LGA) 2002 under s145-154. Section 146(b)(vi) of the LGA 2002 states '*a territorial authority may make bylaws for its district for the purposes of managing, regulating against, or protecting from, damage, misuse, or loss or for preventing the use of, the land, structures, or infrastructure associated with reserves, recreation grounds, or other land under the control of the territorial authority.*'

Section 155 of the LGA 2002 requires that a local authority must, before commencing the process for making a bylaw, determine whether a bylaw is the most appropriate way of addressing the perceived problem. If the local authority determines that a bylaw is the most appropriate way of addressing the perceived problem, it must, before making the bylaw, determine whether the proposed bylaw:

- (a) Is the most appropriate form of bylaw; and
- (b) Gives rise to any implications under the New Zealand Bill of Rights Act 1990.

Section 156 of the LGA 2002 also requires the Council to follow the special consultative procedure when making a new bylaw.

Section 157 of the LGA 2002 sets out the requirements for public notice of the bylaw once it is made.

Section 158 of the LGA requires a bylaw to be reviewed within five years of being made, and pursuant to s159 every 10 years thereafter.

Section 160 of the LGA 2002 sets out the review process.

3 Reason for proposal

The reason for the proposed bylaw is to provide an over-arching enforceable management tool to give effect to the RMP. The RMP contains policy objectives and proposed actions that support the need for the bylaw. This provides for the implementation of the direction set down in the RMP. The RMP sets objectives and actions under Aim 2: Cultural, Aim 3: Environment and Aim 4: Recreation. This includes:

- 1) Restricting motorised boats (power-driven vessels) on Lakes Waikare and Kai Iwi to those power boats that have been specifically authorised:
 - a) as safety vessels for events;
 - b) for scientific and research purposes; or
 - c) for management operations while allowing non-motorised boat activities to occur.
- 2) Controlling vehicle movements to ensure that vehicles are not driven or parked inappropriately so as to compromise the environmental, archeological and cultural values of the Domain; and
- 3) To support biosecurity checks.

Under s155 of the LGA 2002 Council must determine if a bylaw is the most appropriate form to address the issues faced by Council. In this case is, it the appropriate form to give effect to the RMP. If it determines that a bylaw is required, it must determine whether it gives rise to any implications under the Bill of Rights Act 1990. Attached is a copy of the proposed Bylaw (**Attachment A**).

KAIPARA DISTRICT COUNCIL

4 Current situation

Managing recreational activities across the Domain requires clear rules as different recreational pursuits can clash if not managed properly. The adopted RMP gives direction on what activities should be encouraged in specific areas and which should be restricted. A bylaw is needed to give effect to the actions of the RMP as they are not legally enforceable in their own right. The Reserves Act 1977 allows Council to control the use of boats on the Lakes and vehicles within the Domain.

5 Outcomes sought

The overall direction for the Domain, as articulated through the RMP, is one that recognises the Lakes as a taonga with intrinsic environmental and ecological values, that are to be used and enjoyed by Kaipara residents and visitors in a safe and respectful manner that does not damage cultural heritage or ecological values of the Lakes.

6 Relevant bylaw determinations

A bylaw is considered the most appropriate way of giving effect to the direction set out in the RMP. The outcomes sought and the appropriate mechanisms to help deliver the outcomes have been considered. The analysis has been undertaken with regard to the following:

- The purpose of the bylaw is to supplement (and not duplicate) the obligations of people under national legislation or under bylaws such as the Northland Regional Council Kai Iwi Lakes Navigational Bylaw;
- The bylaw is in line with what Council can put in place under the Reserves Act 1977;
- The bylaw gives effect to the management direction within the RMP;
- The bylaw is only one part of the overall approach to address a perceived problem and to ensure strategic alignment of Council's and other agencies' objectives of achieving sustainable management of natural and physical resources;
- A bylaw to address a problem needs to be considered in the context of resources within Council and how enforcement can be achieved in a practical and efficient approach.

Section 77 of the LGA 2002 requires Council to investigate all options that may be useful in achieving the object of its decision.

The options considered by Council are:

- a) Do nothing/status quo.
- b) Use monitoring and education to identify any issues and encourage the public to consider the impacts of power-driven vessels and other vessels on the Lakes and vehicles on the surrounding area and how to best manage any potential harm to the ecological and cultural values attached to the Lakes and their surrounds;
- c) Regulation through the RMP and KDC bylaw.
- d) Combination of regulation through the RMP and KDC bylaw with an associated education campaign and monitoring of compliance. The analysis in this SOP has considered the overall direction for the

Commented [PAH1]: The bylaw was seen to manage use of the Domain in a way that people could still enjoy the Domain without compromising the environment.

Commented [PAH2]: It was recognised that non-powered boats could also impact the lakes in particular biosecurity risks are just as high.

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reserve as displayed in the RMP and how this could be achieved through the three options outlined above.

- Option A: Do nothing/status quo

Doing nothing means Council is not giving effect to the RMP's policy objectives. A need to provide mechanisms to regulate the use of the Lakes and Domain has been identified as essential by the Taharoa Domain Governance Committee, Council Officers, NRC and Mana Whenua.

- Option B: Monitoring and education

While education and monitoring are important aspects to achieve behavioural change, a bylaw allows Council to legally enforce this change using their available resources. The increasing number of visitors, including international, would require considerable resources, both human resources and additional multi-lingual signage and promotional material to educate users of the Domain. This would be an expensive cost to Council. Section 106 of the Reserves Act 1977 allows for the use of bylaws for the management, safety, preservation and use of the reserve and for the preservation of the scenic, biological, geological or other natural features and for the preservation of the natural environment. This section of the Act also specifically allows for a bylaw to control vehicles and boats of any description using or frequenting the reserve.

- Option C: Regulation through a bylaw

By having a bylaw in place means that the objectives of the RMP can be given effect to. The bylaw can restrict the power-driven vessels as outlined in the RMP; control vehicle movements so as not to compromise the environmental, archeological and cultural values of the Domain; and support biosecurity checks that are mentioned within the RMP.

A bylaw contains clear rules and provides enforcement mechanisms that would not be available through education or guidelines. In the absence of a bylaw it is difficult to take action that is contrary to the management direction within the RMP.

- [Option D: Combination of regulation through the RMP and KDC bylaw with an associated education campaign and monitoring of compliance.](#)

[This would give a well rounded response to implementing the RMP and will provide information to inform future reviews.](#)

Following that analysis Council considers that:

- A bylaw is considered the most appropriate, reasonable and practical option of dealing with the issues facing the Domain, [in conjunction with monitoring and education](#);
- This provides certainty and clarity as to what is expected with the use of power-driven vessels on Lake Waikare and Lake Kai Iwi and for appropriate places vehicles can go within the Domain;
- The bylaw also provides a clear and enforceable solution to give effect to the RMP and ensures KDC is meeting its legislative requirements. In particular, the bylaw provides an easy way to address breaches in the management approach outlined in the RMP;
- The bylaw gives effect to the aims, objectives and actions of the RMP;

- The bylaw is the most appropriate form of KDC bylaw and should be notified for public submission;
- The bylaw does not give rise to any implications under, and is consistent with, the Bill of Rights Act 1990, as the controls are reasonable and justifiable in the circumstances allowed for in s5 of the Bill of Rights Act 1990;
- Monitoring will help provide further guidance when the bylaw is reviewed; and
- Education is important to help people understand what is being protected and why.

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Kaipara District Council, as the administering body, has an obligation to ensure the values of the Domain are reflected in the management of the Reserve.

Relationship with the Northland Regional Council Kai Iwi Lakes Navigational Bylaw

Northland Regional Council has recently adopted a Navigational Safety Bylaw for the Kai Iwi Lakes. This bylaw applies to Lake Taharoa only. Lake Taharoa is not included in this proposed bylaw.

The bylaw also provides a clear and enforceable solution to the identified problems and ensures KDC is meeting its legislative requirements.

Taking into account the information above it is submitted that the appended draft Taharoa Domain Bylaw 2018 would be the most appropriate, reasonable and practical option of dealing with the issues facing Lake Waikare, Lake Kai Iwi and the surrounding Domain.

7 Consultation

Under s83 of the LGA, Council will need to invite public submissions on the proposal. It is proposed written submissions must be received by Council by 4.30pm DDMM 2018. All submitters who request a Hearing will be advised of a date and time when they can present their views to Council.

8 Draft Taharoa Domain Bylaw 2018

Section 86 LGA requires a SOP to include a copy of the Draft Bylaw. This is attached below.



Communications and Engagement Plan Taharoa Domain Bylaw

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1 Executive Summary

We the Council need to hear the views of the community about a proposed Bylaw for the Taharoa Domain, so that Council can decide and make the Bylaw before the 2019/2020 summer when the bylaw is likely to be most needed. This will also seek to achieve and support the management direction within the Kai Iwi Lakes (Taharoa Domain) Reserves Management Plan 2016 (RMP).

A key part of this consultation is the management of what is up for discussion. Council will not be undertaking a review of the RMP (the document which sets the direction of the Domain). This bylaw looks to manage traffic, biosecurity risks, and make the restriction of power boats on Lake Waikare and Lake Kai Iwi enforceable.

2 Background

The project team consists of the following roles:

Project management team	Name
Executive Team Member	Fran Mikulicic
Project Manager/Business Analyst	Kathie Fletcher
Lead Contact	Paula Hansen
Subject Matter Expert	Paula Hansen
Support	Mark Schreurs

3 Budget

The project's estimated budget is:

\$3000?

4 Mana Whenua

Council is committed to maintaining strong relationships with Mana Whenua and Māori communities in the Kaipara. Ancestral ties give Te Roroa and Te Kuihi Mana Whenua status over the Lakes and their surrounds. Hence, they have an authority over these areas and a responsibility to act as kaitiaki (guardians).

When engaging with Mana Whenua and Māori, Council will reflect the agreements in place, such as the pending Mana Enhancing Agreement with Te Roroa and the Memorandum of Understanding (MoU) with Te Uri o Hau Settlement Trust, and the pending Mana Enhancing Agreement with Te Roroa. Council recognises the importance of its relationships with the identified Mana Whenua connected to the Lakes. We recognise there are other Māori groups within the district and will also seek to engage with them where this is needed. This will result in better quality decision-making and clearer processes.

5 Key Stakeholders

The audience is everyone that has an interest in the implementation of the proposed bylaw.

Stakeholder	Their interest in the project	Level of input into the project	Status of relationship	Desired outcome
<i>Northland Regional Council (NRC)</i>	Consistency with NRC Kai Iwi Lakes Navigational Bylaw and jurisdictional powers over the Lakes.	Reviewing for consistency between the proposed Bylaw and the NRC Kai Iwi Lake Navigational Bylaw.	Legislative role	Consistent bylaws
<i>Department of Conservation</i>	Administrator of the Reserves Act 1977.	Affected Party	Legislative role	Consistent bylaws
<i>Minister of Conservation</i>	Oversees the Reserves Act 1977 and needs final sign off from the Minister.	Final sign off under the Reserves Act 1977	Legislative role	Consistent bylaws
<i>Business stakeholders</i>	Impact on visitor numbers to the Lakes which in turn impacts the business they may get from the visitors.		-	-
<i>Users of the Lakes</i>	Area is a Public Place. Legislation requires Council to consult under s83 LGA and s86 LGA.	All of these are potential submitters to the proposed Bylaw. 1. Friends of the Kai Iwi Lakes 2. Camp ground users 3. Boating and other clubs who use the Lakes 4. Local community	Legislative role	Workable bylaw Abide by bylaw
<i>Harbour Master</i>	Enforces the Maritime Act for the Lakes.	-	Legislative role	-



6 Key Messages

List the key decisions / changes to be made

Key decisions and changes	Why
New Bylaw	To give effect to the Reserve Management Plan (RMP) and to support the direction stated within.
The Bylaw is to sit beside and complement the NRC Navigational Bylaw	So people understand the relationship with the NRC Navigational Bylaw.
That there are restrictions on power boats are on Lakes Waikare and Kai Iwi.	Without a bylaw the full effect of this management decision within the RMP cannot be given.
Controls around use of boat ramp	Management and mitigation of potential Health and Safety, and environmental issues at the boat ramp.
Controls around supporting Biosecurity Checks	To protect the ongoing health of the Lakes from potential biosecurity risks.
Controls around where vehicles can be parked and what areas within the Taharoa Domain can be accessed by vehicles.	This is to help protect the wider Domain environment, preventing damage to sensitive environments or places of cultural significance.
Timeframes: what will happen next after submissions close.	Hearings and deliberations will be held in February 2019 with a final bylaw going to the Council meeting in March 2019. Sign off from the Minister of Conservation (or their representative) will then be sought. Once this sign off has been gained a public notice can then be placed stipulating when the bylaw will come into force.
2 – Month Consultation over December – January 2018/2019	This is to capture as many users to the Lakes as possible.

7 Communication platforms

Platform	Used for	When
Paper copies of bylaw and submission forms available	Hui at Iwi offices and or marae	Prior to public consultation
News article and back page	Back page Mayoral update Media Release	Beginning of December 2018 – special Summer Lifestyler edition.

Platform	Used for	When
		Early January 2019 media coverage
e-newsletters	Email to community groups	Beginning of December 2018 and reminders beginning and end of January 2019.
Website	Dedicated page linked to Homepage. Link on Taharoa Domain Camp Ground webpage	Ready to go prior to consultation beginning.
Face-to-face formal meetings – Mayor and councillors	Interviews/meetings with stakeholders	Maybe tie in with the information days suggested below.
Dedicated e-mail address	Means for direct feedback	Needs to be set up prior to the consultation period.
Paper copies of bylaw and submission forms available.	To be made available at the camp ground	Ready to go prior to consultation beginning.
Kai Iwi Lakes information Days	Face to face conversations to talk to people about the Bylaw and any other ?other what?	2-3 individual Days out at the Kai Iwi Lakes over the summer period. May be able to tie in with other events or consultations that could occur over the same time period.

8 Communication programme

What we want our audiences to know, think and do as a result of the communication?

- Feel they have been heard and their views considered;
- Understand why Council has made the decisions;
- Come on board to assist Council in implementation (advocacy/volunteer action);
- Feel supported by Council in their actions.

Who	When	What	Why
Mana Whenua	Throughout consultation process	That the bylaw is being implemented to protect, enhance and manage the impact on the cultural values attached to the Lakes and surrounds.	To solidify an authentic relationship with Mana Whenua by enhancing mana, protecting mauri and upholding tapu.

Who	When	What	Why
Regular users of the Lakes	Throughout consultation process	That the bylaw is being implemented to protect, enhance and manage the demand visitors and users place on a fragile environment.	To minimise outrage, and re litigation of the power boats decisions of previous Councils.
Everyone	Throughout consultation process	Feel they have been heard and their views considered.	To ensure a spread of views and feedback is brought forward to the Council/Committee.
Everyone	Throughout consultation process	That the correct process has been followed even if they do not agree with the outcome.	To minimise judicial review.

9 Issues and Risks

Issue/Risk	Impact/likelihood	Mitigation	Responsibility
Re-litigation of the direction in the RMP	High	Clear communication messages around the scope of what they can submit on through the consultation.	Policy Team and Comms who is this please? Need it in full. ta.
Process is flawed	Low	Legal review and input into key resolutions and documentation.	Policy Team

10 Measures of success

We will know we are successful when we have:

1. Mana Whenua support and agreement.
2. Received submissions that have considered issues and provided relevant feedback.
3. The quality of input which clearly reflects an understanding of scope of the consultation process.
4. Received 75% of the submissions which can be directly attributed to parts of the proposed bylaw.

10.1 Process to evaluate

The Taharoa Domain Bylaw Consultation process will be monitored as part of discussions at a Taharoa Domain Governance Committee meeting, and once all submissions are collated and Policy report tabled.

5 Information

File number: 4702.24.02.02 **Approved for agenda** ☒

Report to: Taharoa Domain Governance Committee

Meeting date: 15 November 2018

Subject: Taharoa Domain Operations Update: August 2018 to October 2018

Date of report: 01 November 2018

From: Hamish Watson, Parks and Recreation Manager

Report purpose ☒ **Decision** ☐ **Information**

Assessment of significance ☐ **Significant** ☒ **Non-significant**

Summary

The Committee is charged with implementing the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan (RMP) 2016. The RMP has been developed to provide strategic guidance to the custodianship and enhancement of Kai Iwi Lakes (Taharoa Domain).

The following is a brief summary of activities, operations and maintenance work carried out over the months of August 2018 to October 2018.

- The new toilet facilities at Lake Waikare and caravan dump station are progressing. We have had to apply for resource consent for the public toilet due to proximity to the Lake and the surrounding area's aesthetics;
- Awaiting quotes for the additional powered sites at Pine Beach. Staff have investigated solar power for the extra facilities, but at this stage we have been recommended against it due to the remoteness of the area as they would be prone to theft and vandalism. Staff will continue to investigate options;
- The work joining the Taharoa and Waikare tracks has been completed;
- The last of this year's Restoration Plants for the Domain have been delivered. These will need to be watered over the summer months;
- The annual animal pest poisoning programme has been completed by NRC, and the trapping will continue as usual;
- Carry forward budgets of \$64,000 for a boat ramp and bio-security screening were approved by Council. Staff are now waiting on design concepts for the boat ramp, and once this is agreed then we can design the bio-security screens;
- As a part of the new Long Term Plan 2018/2028 (LTP) Council adopted the Reserve Contributions (use of) Policy. Its implementation is still being finalised and may impact on the available Capital funds for the Taharoa Domain;
- New signage regarding the boating bylaws have been erected at Lake Waikare;
- Signage for 'no freedom camping' has been erected around the Domain;
- Pest plant removal has continued;
- Good start to summer with a stunning Labour weekend with lots of campers and day visitors enjoying the facilities;

- Upcoming events include the annual open water swim, Project Jonah whale rescue training day and the Whitebait Connection Education Day (**Attachments 1 & 2**);
- Te Roroa Honey has approached Council regarding placing beehives at Taharoa Domain. Staff are currently reviewing this proposal and discussing with Te Roroa Honey;
- Only one (1) concession to provide food at Pine Beach was received. As a part of their application they have requested a three-year concession;
- NRC has supplied the Lake water quality testing results (**Attachment 3**).

Recommendation

That the Taharoa Domain Governance Committee receives the Parks and Recreation Manager's report 'Taharoa Domain Operations Update: August 2018 to October 2018' dated 01 November 2018 and the information contained therein.

Reason for the recommendation

To ensure the Committee is informed about the implementation of the Kai Iwi Lakes (Taharoa Domain) RMP and information regarding the ongoing Domain and camp grounds operations.

Reason for the report

To present the operational report for the Kai Iwi Lakes (Taharoa Domain) for the August 2018 to October 2018 period so the Committee can be well-informed.

Background

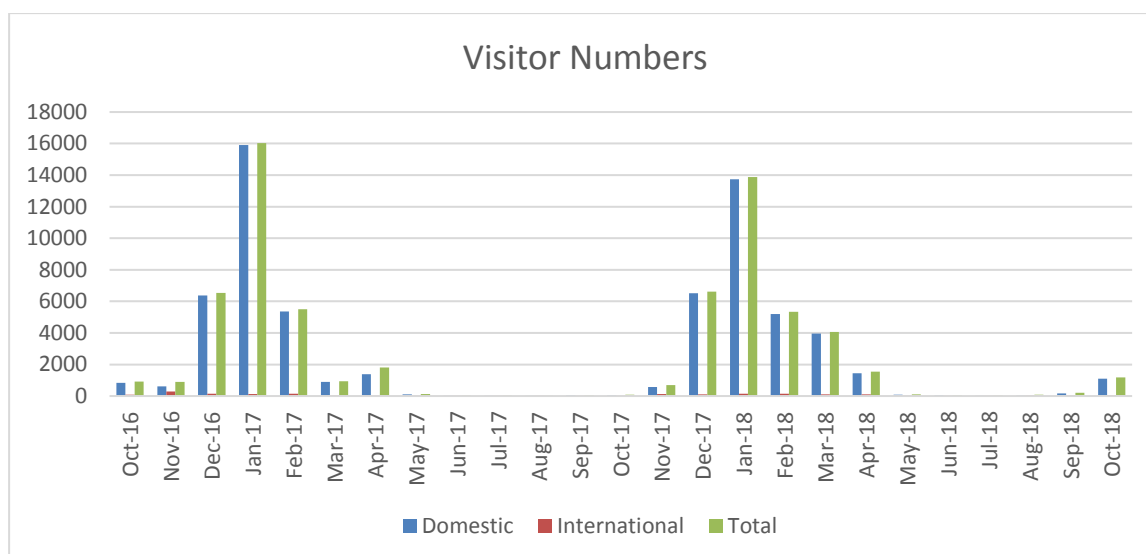
The Committee is charged with implementing the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan (RMP). The RMP has been developed to provide strategic guidance to the custodianship and enhancement of Kai Iwi Lakes (Taharoa Domain).

The Kai Iwi Lakes are among the best known dune lakes in New Zealand and all three Lakes, Taharoa, Waikare and Kai Iwi, are ranked as outstanding by NIWA. Growing populations, particularly Auckland, along with road improvements has led to increased visitors and associated pressures.

It is the intent of the RMP to enable the Lakes and its surrounds to be enjoyed by all visitors while simultaneously enhancing the area and reducing risks through knowledge and active management.

Finding a balance between public use and ensuring its continued health and well-being of the Lakes is a challenge for the Committee. Continued thought, collaboration, planning and funding is required around pest and weed control (the largest issues facing the long term health and natural character of the Domain) along with biosecurity (aquatic weed incursion and prevention), understanding the hydrology of the Lakes, as well as recognising the cultural importance of the area.

Below is a table that shows the number of campers from October 2016 to October 2018 and breaks the numbers down to domestic and international visitors.



Visitor numbers

Month	Total visitors	Domestic visitors	International visitors
October 2018	1,170	1,099	71
September 2018	209	175	34
August 2018	85	50	35
July 2018	43	31	12
June 2018	73	59	14
May 2018	109	78	31
April 2018	1,544	1,446	98
March 2018	4,066	3,953	113
February 2018	5,331	5,188	143
January 2018	13,884	13,739	145
December 2017	6,626	6,514	112
November 2017	689	561	128
October 2017	74	64	10
September 2017	63	55	8
August 2017	27	12	15
July 2017	53	32	21
June 2017	47	29	12
May 2017	129	114	15
April 2017	1,816	1,376	33
March 2017	939	904	35
February 2017	5,500	5,363	137
January 2017	16,022	15,899	123
December 2016	6,531	6,382	149
November 2016	888	609	279
October 2016	921	828	93

Factors to consider

Community views

The RMP was developed using a public process and reflects the views of the community and other stakeholders at the time of its development.

Policy implications

Nil. Operational decision-making has been consistent with the RMP.

Financial implications

It is the Parks and Recreation Manager's responsibility to ensure all operations are conducted within budget. The financial budgets are set within the LTP and respective Annual Plans. Operative budgets and performance are reported in a separate financial report.

Legal/delegation implications

There are no delegation issues; the Committee has delegated authority from Council to govern the Domain in terms of the RMP.

Assessment of significance

This matter does not trigger Council's Significance and Engagement Policy.

Next step

Council Officers will continue to implement the RMP.

Attachments

Attachment 1 [Kai Iwi Lakes Open Day](#)

Attachment 2 [Kai Iwi Lakes Event Plan](#)

Attachment 3 [NRC Lake water quality testing results](#).



Important Event Information

Event:

Kai Iwi Lakes Open Day

Date:	26/01/19 (pp 27/01/19)
Time:	10:30 – 15:30
Location:	Lake Waikare
Event coordinator :	Isabel Krauss, Whitebait Connection
Contact:	022 321 2818

Key Messages/ Objectives:

- Attract locals and visitors to attend the day
- People get an understanding of the:
 - values and significance of the lakes
 - interconnectedness of the environment around the lake – the wider ecosystem/ catchment.
- People:
 - are engaged through fun activities that give them a sense of ownership and inspire them to help protect the lakes.
 - are aware of how they can help to protect the lakes
 - understand how to keep safe in the water whilst snorkelling or swimming
 - know where to get more information from
- Strengthen relationships between local stakeholders
- Promote World Wetlands Day
- Promote behaviour change in the three following areas:
 - Always Check, Clean, Dry between waterways
 - Leave only footprints – don't put anything in the lakes except yourself as it will stay there! (urine, shampoo, runoff, sunscreen, rubbish, food scraps etc)
 - Water safety – always be safe in and around water

Hazards/ Risks

- Collision in water
- Collision on land
- Natural disaster
- Heat exhaustion or hypothermia
- Sunburn
- Drowning
- Fall or slip during activity
- Activity providers not aware of health and safety plan

Controls

- Use of shore watch safety person and dive flag
- Activity area cordoned off from traffic
- First aid and assembly point notified
- Sensible assessment of participants and environmental conditions
- Provision of sunscreen
- Activity specific health and safety plans and presence of safety watch person, safety boat, and trained first aiders
- Safety briefing given to all activity providers and assistant organisers at 10:00 before public arrive
- Event held in lake where no power boats are permitted (apart from safety boat)

Weather environment, conditions: Event organiser will make a call on the weather by Friday 25 January. The back-up day is Sunday 27 January. All activity providers have provided their own activity specific health and safety plan. There will be a safety watch person on shore keeping a look out. The area around the activities at the Lake Waikare Events Centre is excluded with bollards from traffic.

Resources / protective equipment required: First aid kit, sunscreen, loud hailer, PA system. All activity providers will provide their own activity specific resources and equipment e.g. wetsuits for snorkelling.

First Aid location:	Registration tent
First Aid trained personnel:	Registration tent

Fire extinguisher location:	Waikare Events Centre
Alarm location:	EMR tent (loud hailer)
Assembly point:	Grass area beside registration tent
Emergency contact:	111 (Police, Fire, Ambulance)



Group briefing

Overall group briefing to be held at 10:00am at Lake Waikare:

- Welcome everyone
- Karakia if appropriate
- Acknowledge partners and sponsors
- Go through objectives of the day
- Go through plan for the day – location of activities – hand out site map and point out things of significance on map. Ensure each activity provider has their own briefing.
- Overarching health and safety info – e.g. hazards and mitigation measures, emergency procedure and location of first aid personnel (list who is trained and keep list in rego tent), first aid kits, fire extinguisher, alarm, VHF radios, assemble areas, sunscreen and drink refill station. All 5 activity holders to ensure they have medical conditions and emergency contact info for all of their volunteers.
- Activity providers and stands to take photos of crowd to estimate total number of visitors
- Send photos to Isabel at end of day please for media release and Facebook pages isabel@whitebaitconnection.co.nz . Please get names and permission!!
- Encourage people to do evaluation (required for entry to spot prize draw).
- Debrief for providers at the end of the day, followed by photos and report via email later on

Event Plan Kai Iwi Lakes Open Day 2019

Overview	
When	<p>Time: Main event: 10:30am-3:30pm (set up time from 7:30am – group briefing at 10:00am)</p> <p>Night Snorkel Trail: 8:00pm-9:30pm (13 years old and over only, numbers limited to 28 – registrations essential)</p> <p>Date/s: Saturday 26 January 2019 to target campers and locals and tie in with World Wetlands Day</p> <p>BACK UP DAY is Sunday 27 January, 2019.</p>
Where	<p>Main event base: Lake Waikare by the Lake Waikare Event Centre</p>
Objectives	<ul style="list-style-type: none"> • Attract locals and visitors to attend the day. • People get an understanding of the values and significance of the lakes. • People get an understanding of the interconnectedness of the environment around the lake – the wider ecosystem/catchment. • People are engaged through fun activities that give them a sense of ownership and inspire them to help protect the lakes. • People are aware of how they can help to protect the lakes. • People understand how to keep safe in the water whilst snorkelling, or swimming. • People know where to get more information from. • Strengthen relationships between local stakeholders • Promote World Wetlands Day • Promote behaviour change in the three following areas: <ol style="list-style-type: none"> 1. Always Check, Clean, Dry between waterways. 2. Leave only footprints - Don't put anything into the lakes except yourself as it will stay there! (urine, shampoo, runoff, sunscreen, rubbish, food scraps etc.). 3. Water Safety - Always be safe in and around water.
Activities	<ul style="list-style-type: none"> • Day and Night Snorkel Discovery (including night snorkel) • TBC Waka Ama - Hikuwai O Kaipara Waka Ama Club (6 members) • TBC Circus activities - Circus Kumarani (conservation theme) • TBC Guided walks - biodiversity and cultural interpretation - NRC: Katrina and Lisa • TBC Monster SUP rides: Joanna Roberts - SUP BRO • Biosecurity and Biodiversity Displays - NRC/ Whitebait Connection • CCD activities (hide the weeds - diagram) - NRC - Bevan Morgan • Business card collection draw

Stalls	<ul style="list-style-type: none"> • Registration HQ – including passports, first aid, sunscreen, water refill station, koha/donation box (towards Waka Ama nationals), evaluation board. Natalie plus a volunteer • Kai Iwi Lakes Catchment/Dune Lakes– in show trailer by Biosecurity tent - Natasha • Check Clean Dry Activity/survey/Display – NRC intern plus a student • Entertainment – music through PA system near main registration tent. Circus Kumarani / Big River FM • TBC BBQ by Kai Iwi Lakes staff Andrew Howells and other KDC staff • Coffee and Iceblocks for sale - Serena Carran • Water Safety Display - Coastguard North Kaipara 	
Key Stakeholders and contacts	Taharoa Domain Governance Committee	Sonny Nesbit (Te Roroa) Ric Parore (Te Kuihi)
	Kaipara District Council (KDC)	Andrew Howells
	Hikawai O Kaipara Waka Ama Club	Roxanne Kelly/ Serena Carran
	Mountains to Sea Conservation Trust (Whitebait Connection and EMR)	Isabel Krauss, Nina Pivac Lorna Doogan, Sophie Journee
	Check Clean Dry/MPI	TBC
	Sport Northland	Roxanne Kelly
	Department of Conservation (DOC)	Karen Joyce-Paki Sapphire Mansell
	Northland Regional Council (NRC)	Laura Shaft Natasha Stubbings Lisa Forester Katrina Hansen
	Local Schools – Northern Wairoa	Dargaville Intermediate School Te Kopuru School Pouto School Kaihu Valley School Aranga School Dargaville Primary School Tangiteroria School Ruawai School and College Tangowahine School Arapohui School Dargaville High School St Joseph's Selwyn Park Primary
	Te Roroa and Te Kuihi	Ric Parore Sonny Nesbit
	Fish and Game	
	Fire and Emergency Te Kopuru Fire	David Milich
	Circus Kumarani	Abbe Clark
	Water Outlook (sponsor)	Mark Homenuke (NZ General Manager) Peter Johnson (CEO, International Manager)

Activities	Tasks	Who
Welcome and karakia	Delivering this on the day	Person TBC
Group briefing	Overarching event plan info and health and safety plan	Isabel Krauss
Snorkelling	organise activity and RAMS and snorkel guides Night snorkel bookings: https://goo.gl/forms/KzKd0BbFNAW6iRoh2	EMR – Lorna/Sophie
Biosecurity Activities/ Display	Organise activities and resources and NRC staff	Natasha Stubbing assisted by Lisa Forester. CCD display by NRC staff
Guided Walk	Organise activity and RAMS and resources	NRC Biodiversity team members
Waka Ama	Organise activity and RAMS and resources	Serena Carran to lead this activity.
Circus Kumarani	Organise activity and RAMS and resources	Abbe Clark
Giant Stand Up Paddleboard	Organise activity and RAMS and resources	Joanna Roberts - SUP BRO
Stalls	Tasks	Who
Registration HQ and evaluation	Organise the registration tent and resources and staff and overall event WBC display with pest fish bowl	Isabel Krauss assisted by volunteer/s. Promote putting sunscreen on AFTER the snorkel. Nina Pivac and Rosie Palmer
Check Clean Dry Displays	Organise and set up the Check, Clean, Dry display	NRC staff
Food and Drinks	BBQ by Kaipara District Council staff. Water re-fill station set up Coffee Cafe food (hot food, cakes and slices, smoothies, iceblocks)	Water container full at the rego tent – provided by Roxanne Diane Miller picking up containers from Roxanne Serena Carran Barking Zebra Cafe - Kim

Kai Iwi Lakes Catchment display	Catchment/biodiversity and dune lakes/WWD/Dune Lakes movie display	Lisa and Katrina Hansen in show trailer
First Aid Station at registration tent	Sunscreen, first aid supplies, water and drink bottles etc.	Isabel (first aid) and volunteers (sunscreen and water) Roxanne to provide water containers and tents - to be picked up before the event. - Andrew Water available in the ski club.
Entertainment	Music (playlist) through PA	Isabel Krauss - playlist Circus Kumarani to provide PA system
Other	Tasks	Who
Safety Kayak		EMR to provide for snorkel activity
Safety Boat		Te Kopuru Fire (David Milich)
Prizes:		<ul style="list-style-type: none"> • Yet to be confirmed
Prepare evaluation collection plan		Isabel Krauss
Gear List		
Toilet Paper and cleaning materials for ski club		
PA system		
Crew Gear & Equipment booked: NRC: <ul style="list-style-type: none"> • Gazebos (1 big, 2 small) – for NRC display • CCD gear • Tables (6) – 4 for NRC display/games and 1 for Isabel and 1 for main registration tent • Coreflute sign holders for activities (6) • Show trailer with catchment/dune lake/CCD display theme including hand out to promote dune lakes movie. Could also play EMR 2018 night dive film. • Family pass to field days prize and prize pack KDC:		

<ul style="list-style-type: none"> • KDC gazebos (2) To be used for rego tent and waka ama rego tent • Kai Iwi Camping prize <p>Sport Northland:</p> <ul style="list-style-type: none"> • 5 Run/walk series prizes • Registration tent gear and all waka ama gear <p>DOC – Sapphire Mansell</p> <ul style="list-style-type: none"> • Games and worksheets • Gazebo and display for guided walk • Trounson Kauri Park prize <p>BBQ and all resources – Andrew Howells ?</p> <p>Coffee and icecreams</p> <p>MTSCT:</p> <ul style="list-style-type: none"> • WBC Banner (Isabel) and stand • EMR: All equipment needed for snorkelling activity. EMR t-shirt spot prize <p>Overall Event gear:</p> <ul style="list-style-type: none"> • Stamps, Road signs, waratahs, cable ties, mallet, registration tent table, Dune Lakes CCD banner for rego tent, first aid kit, rope, event plan, evaluation board, H&S important info, laminated activity name A3 posters, phone/contact list, volunteer rego forms, volunteer petrol vouchers, prizes, gee minnows and fish tank and trays for Gambusia and plants? WBC banner 	<p>Serena Carran</p> <p>Isabel</p> <p>Lorna, Sophie and volunteers</p> <p>Isabel</p>
Laminated A3 signs for each activity to bluetack onto NRC core flute signs.	Isabel - TBC
Printed laminated overarching health and safety plan. Also circulate via email.	Isabel
Evaluation board	Isabel

Timetable: Kai Iwi Lakes OPEN DAY 2018	
Friday 26 January	Some camping over-night Isabel set fish traps for live displays and Camp staff display flyers at Promenade and Pine Beach communal facilities
Saturday 27 January 2018:	
7:30am-10:00am	Crew arrive to set up <ul style="list-style-type: none"> • <i>All activities must be set up and ready to go by (10:00am)</i>
10:00am	Karakia, welcome to all crew and briefing
10:15am	Individual activity briefings

10:30am	Event begins!
1:00pm	Optional LUNCH BREAK. Free sausage for all volunteers and activity holders at BBQ
1:30pm	Activities continue
3:30pm	<ul style="list-style-type: none"> • Prize giving at 3pm • Event close • Pack up • Clean up
7:00pm	Set up for night snorkel
8:00pm	Night snorkel registrations confirmed and gearing up begins
8:30pm	First rotation night snorkel (twilight snorkel)
9:00pm	Second rotation night snorkel
10pm	Event finishes – pack up Gates to be open until 10.30pm

Health and Safety Plans:

An overarching event health and safety plan and a collation of the different activity provider plans will be available in a separate document. **To clarify responsibilities around overlapping duties:** all responsibilities will be clearly outlined in this document and will be agreed upon at the final planning meeting. Each activity provider must provide their own Health and Safety plan for their activity which will go into one document as appendices to the overarching event plan.

2019 Event poster/flyer (yet to come, but will be similar to flyer in 2018)

KAIWI LAKES

FREE OPEN DAY 2018

Lake Waikare, Sat 27 Jan 2018, 10:30am - 3:30pm*

*Postponement date in case of bad weather: Sun 28th Jan. Postponements on Whitebait Connection Facebook page.

Something for all ages!

Prizes

Waka Ama

Guided Walks

Day/Night* Snorkelling

Circus Kumarani

Displays & Games

Food & Drink for cash purchase

Health Promotion



Proudly hosted by:



Proudly supported by:

*Night-time guided snorkeling. Registrations at info@emr.org.nz



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FOUNDATION NORTH
Te Kaitiaki Takekōwhiri o
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Te Kaitiaki Takekōwhiri o



World Wetlands Day
2 February 2018
Wetlands for a sustainable urban future



Hikurangi O Kaipara Waka Ama Club

Recreational Services
FOUR PARKS AND GREEN SPACES SPECIALISTS



Te Ha Oranga



For more info: www.whitebaitconnection.co.nz

Kai-iwi lakes water Quality monitoring update

Since 2014 the Kai-iwi lakes has seen improving trends in the main water quality parameters tested. Lakes Taharoa, Wakare and Kai iwi occupy the top 3 positions on the ranked trophic level index, compared to all 27 lakes monitored throughout Northland. Throughout 2018, slightly reduced secchi measurements have been observed in Lake Kai-iwi. However, a new record for secchi depth was observed in Lake Waikare in August 2018 (~15m) and the Autumn NIWA lake SPI survey also observed a record submerged plant depth growing limit of 27.5 m in Lake Taharoa, validating the improving water quality seen in the results.

Improved water quality has coincided with management efforts to control nitrogen fixing Sydney Golden Wattle within the lake catchments. However, long term variations in climate may also influence the water quality trends observed.

Most lakes monitored by Northland Regional Council have automatic water level recorders installed. Higher temporal resolution of the recorders compared to manual readings enhances information regarding water balance and nutrient models and validates climate information. The Kai-iwi lakes do not have automatic water level recorders installed, we're currently reviewing this gap in the water quality monitoring programme and may be able to address this shortfall next financial year. Support for water level infrastructure installation would be appreciated.

Appendix

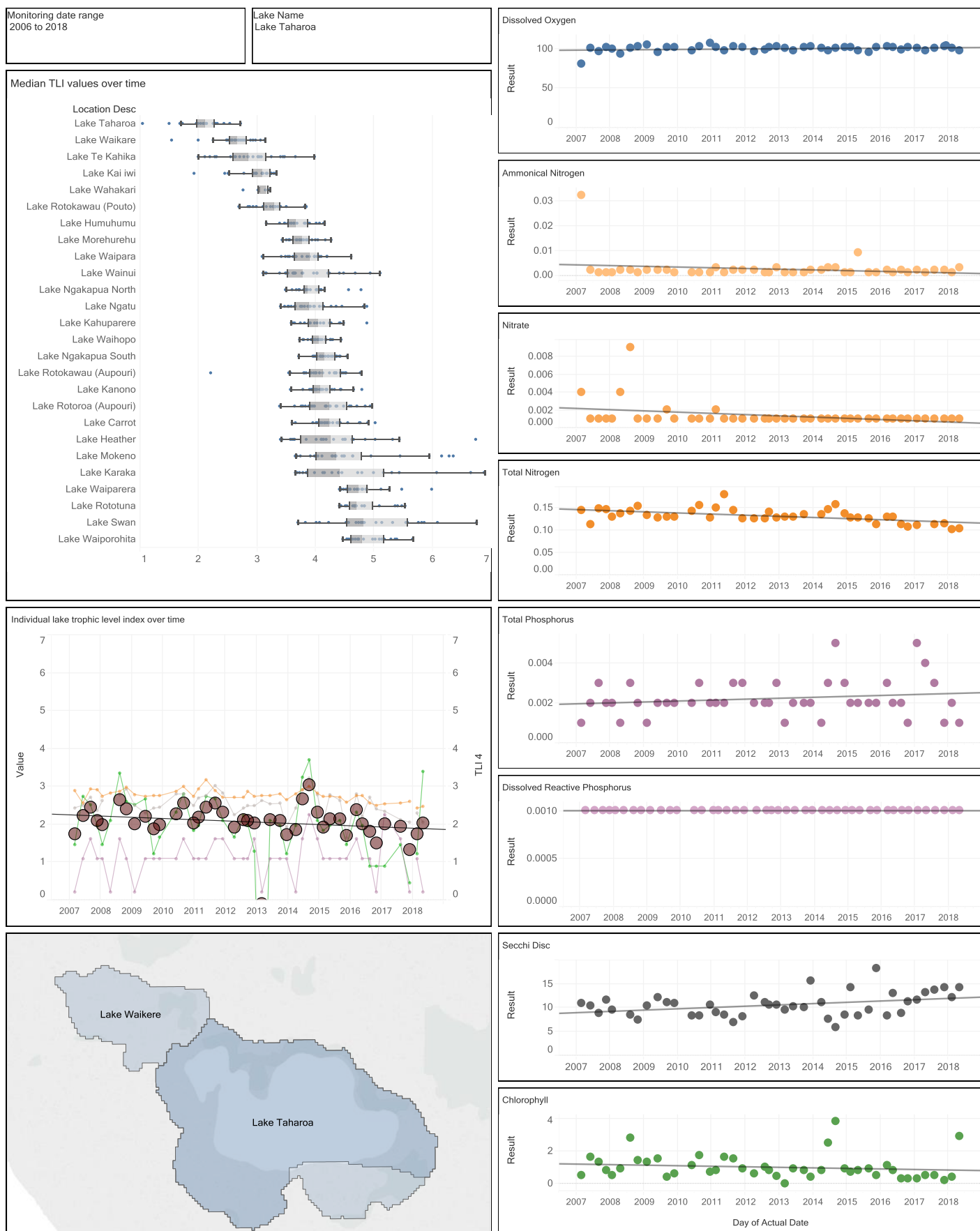


Figure 1. Lake Taharoa water quality results summary

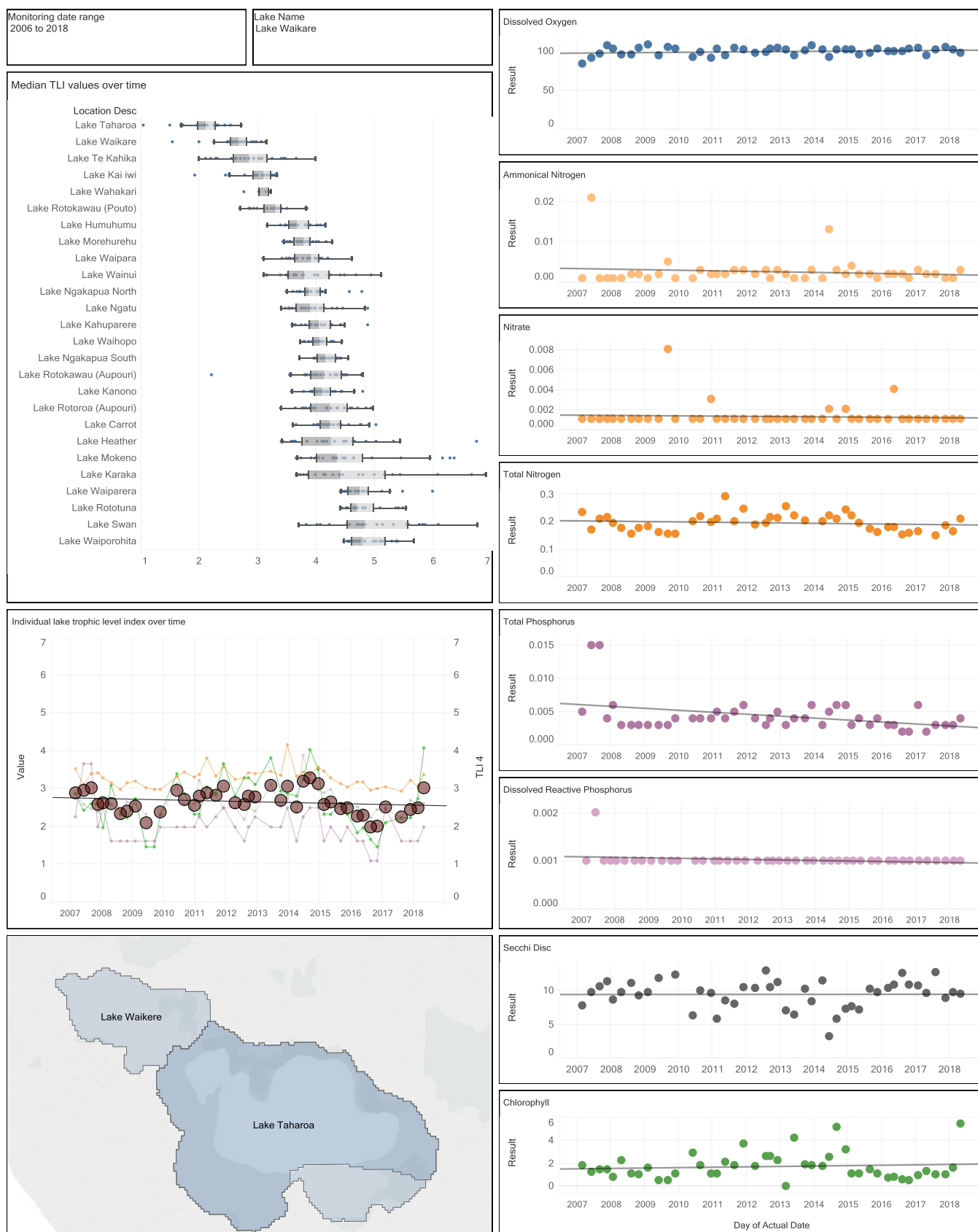


Figure 2. Lake Waikare water quality results summary

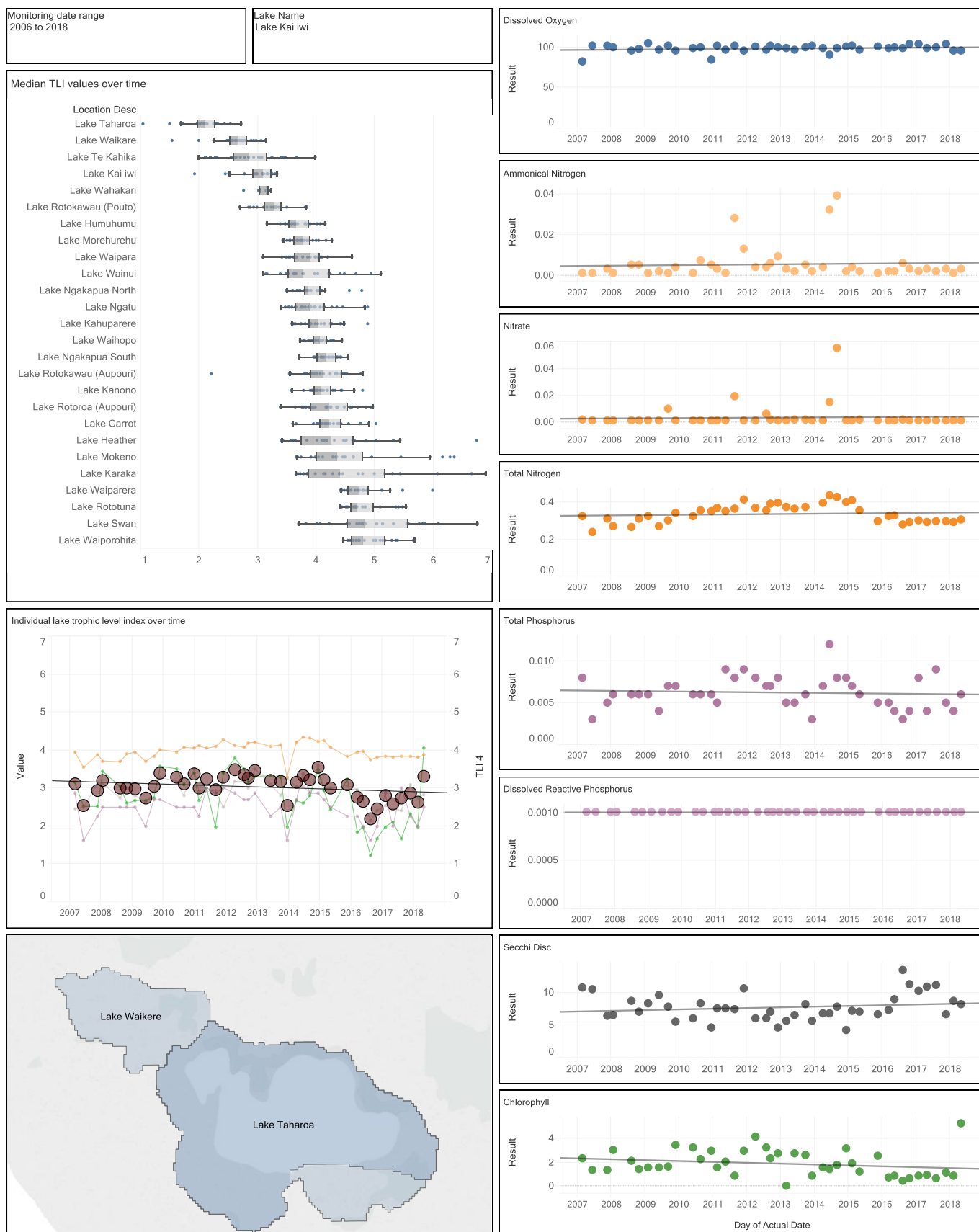


Figure 3. Lake Kai iwi water quality results summary

5.2 Financial report for the four month period ending 31 October 2018

Financial Services Manager **4702.24.02.01**

Recommendation

That the Taharoa Domain Governance Committee receives the Financial Services Manager's report 'Financial report for the four month period ending 31 October 2018'.

Taharoa Domain
Financial Summary Report for the four month period ended 31 October 2018

Revenue	Kai Iwi Camp	Taharoa Domain	ACTUAL 4 months to 31.10.2018	BUDGET 12 months to 31.10.2018
				\$
Camping fees	130,466		160,466	434,500
Other Income	-	30,000	-	-
TOTAL	130,466	30,000	160,466	434,500

Expenditure	Kai Iwi Camp	Taharoa Domain	ACTUAL 4 months to 31.10.2018	BUDGET 12 months to 31.10.2018
Description				\$
Transport costs	-	2,020	2,020	17,856
Resource Consents	-	472	472	840
Grounds maintenance	835	15,662	16,497	167,000
Building maintenance	4,108	5,323	9,431	60,500
Professional service	9,033	-	9,033	51,416
Advertising and promotion	-	1,439	1,439	1,584
Staff salaries and employee costs	18,376	24,740	43,476	211,785
Insurance	6,971	5,455	1,516	4,381
Power and water costs	4,415	-	4,415	12,384
Refuse disposal	2,500	2,500	5,000	30,000
Sundry	7,018	7,303	14,321	40,491
TOTAL	53,256	54,005	107,621	598,237

Capital Expenditure	Kai Iwi Camp	Taharoa Domain	ACTUAL Total 4 months to 31.10.2018	BUDGET Total 12 months to 31.10.2018
				\$
10087 Kai Iwi facilities				180,000
10705 Public Toilets - Lake Waikare				40,000
10706 Taharoa Domain RMP				34,000
11019 Implement Reserve Management Plan		54,662		100,000

File number: 4702.24.05 **Approved for agenda** ☒
Report to: Taharoa Domain Governance Committee
Meeting date: 15 November 2018
Subject: Kai Iwi Lakes Dune Lakes Galaxias Working Group update
Date of report: 26 October 2018
From: Mark Schreurs; Policy Analyst
Report purpose ☐ **Decision** ☒ **Information**
Assessment of significance ☐ **Significant** ☒ **Non-significant**

Summary

At their 16 August 2018 meeting, the Taharoa Domain Governance Committee (the Committee) was provided with a report giving an update on the work of the Kai Iwi Lakes Dune Lakes Galaxias Working Group (the Working Group). This led the Committee to ask a number of questions about the work of the Working Group in the wider context of its history. This report provides the information requested together with a general update on recent progress the Working Group has made.

In summary, one of the Working Group's first tasks was to analyse a literature review prepared by NIWA titled "Dune lake galaxias in the Kai Iwi Lakes: Review of status and development of a long term monitoring plan". This NIWA report has been the key piece of work guiding the work of the Working Group. Following a review of this report, the Working Group agreed on a list of research priorities that it recorded in a Dune Lakes Galaxias Monitoring Strategy. This Strategy was adopted by the Committee on 10 August 2017. Since then, the Working Group has been working to progress the key projects listed in this Strategy. At present these include:

- Identify dune lake galaxias (DLG) spawning sites and timing;
- Collecting a sample of DLG to analyse their otoliths (a bony structure in the ear/gill of the fish) to identify when they spawn;
- A review of the Department of Conservation's spotlight monitoring method, including re-analysing the data to better identify trends;
- Explore interactions between DLG, trout and Gambusia, including designing an experiment to test if the presence or absence of trout has an overall positive or negative effect on the DLG;
- Creating a population model for each species;
- Studying how trout diet varies throughout the year and throughout their lifespan;
- Studying the distribution and behaviour of Gambusia in the Lakes and giving thought to Gambusia control;
- Exploring the possibility of translocating DLG. This project would seek to establish a population of DLG in another lake where they would be safe from trout and Gambusia. This could reduce the risk of the species becoming extinct; and
- Supporting studies e.g. monitoring of tuna (eels) and koura/kewai.

In addition, the Committee at their 16 August 2018 meeting also requested that a research protocol be prepared to guide how the Working Group and other research practitioners undertake research activities, how they involve Mana Whenua values in their activities and how they seek approval from and report to the Committee. A draft Research Protocol has been developed and is currently being reviewed by staff from Te Roroa. The Kai Iwi Lakes Dune Lakes Galaxias Working Group will discuss the draft Research Protocol at their 23 November 2018 meeting. Following input from the Working Group and Te Roroa, the final draft Research Protocol will be presented to the Committee for adoption.

Recommendation

That the Taharoa Doman Governance Committee receives the Policy Analyst's report 'Kai Iwi Lakes Dune Lakes Galaxias Working Group update' dated 26 October 2018 and the information contained therein, giving an update on the work of the Kai Iwi Lakes Dune Lakes Galaxias Working Group and its members.

Reason for the recommendation

So the Committee may be updated on the work of the Kai Iwi Lakes Dune Lakes Galaxias Working Group and its members.

Reason for the report

To update the Taharoa Doman Governance Committee (the Committee) on the work of the Kai Iwi Lakes Dune Lakes Galaxias Working Group (the Working Group) and its members, and to provide answers to the questions raised by the Committee at their 16 August 2018 meeting.

Background

The Dune Lakes Galaxias (*Galaxias sp.*) (hereafter referred to as the DLG) is a small native fish found only in the Kai Iwi Lakes and there are fears its population is declining. In response to this problem, Te Roroa, Te Kuihi, Kaipara District Council (KDC), Northland Fish and Game Council (Fish and Game), Northland Regional Council (NRC), NorthTec and the Department of Conservation (DOC) have formed the Kai Iwi Lakes Dune Lakes Galaxias Working Group (the Working Group). The members of this group are making a co-ordinated effort to better understand the DLG, its ecology, interactions with other species and what management actions will be successful in promoting its survival.

The Committee at their Thursday 16 August 2018 meeting raised a number of questions about the work of the Working Group, how its projects had been developed and are progressing. In answer to these queries, the following timeline (Table 1) has been compiled to give a history of the Working Group and the evolution of its projects.

Table 1: Project timeline detailing the work of the Kai Iwi Lakes Dune Lakes Galaxias Working Group. Projects/work streams are colour coded to allow their evolution and progression to be easily tracked.

Date of Action	Action	Explanation
26 September 2016	Kaipara District Council (KDC) adopted the new Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP). This was based on a recommendation from the Taharoa Domain Governance Committee (the Committee) that the RMP be adopted in that form.	The new RMP included the direction “ <i>to stop the release of exotic fish (trout) by 2018 into Lakes Taharoa and Waikare, but consider re-releasing trout if native species numbers are seen to decline in their absence</i> ”. This was contrary to the submissions made by Fish and Game and others, as well as the legal advice provided by Fish and Game. Fish and Game had previously advised Council that, if Council proceeded with this direction, Fish and Game would be forced to seek a judicial review of the RMP.
22 March 2017	Fish and Game informed Council that they were preparing to commence a judicial review.	Rather than beginning the review, Fish and Game offered to meet with Council first in the hope of reaching an agreement that would avoid legal proceedings. An agreement with the Committee was later reached at a meeting with Fish and Game on 02 May 2017 (see below).
April 2017	NIWA completed a literature review titled “Dune lake galaxias in the Kai Iwi Lakes: Review of status and development of a long term monitoring plan”.	The report was commissioned by the Northland Regional Council (NRC) and funded by an Envirolink grant from the Ministry of Business Innovation and Employment (MBIE). The report recommended: <ul style="list-style-type: none"> • focus predominantly on understanding population dynamics of DLG; • monitoring should also be undertaken to understand population dynamics of other fish species present in the Lakes, particularly trout and Gambusia; • monitoring efforts should seek to understand the links between fluctuations of populations of these three species; • robust, quantitative baseline monitoring is carried out prior to ceasing trout stocking.

Date of Action	Action	Explanation
		<p>Other recommendations included; a study of trout diet, habitat competition between DLG and Gambusia and studies of the tuna (eel) and koura (crayfish).</p> <p>This report has been the key piece of work guiding the actions of the Working Group.</p>
02 May 2017	The Committee met with Fish and Game to discuss the implications of ceasing trout releases in the Lakes. This included considering the recommendations of the NIWA report.	<p>The proceedings and resolutions of this meeting were captured in a letter from KDC's lawyers dated 05 May 2017 (Attachment 1).</p> <p>In summary, the outcome of the meeting was:</p> <ul style="list-style-type: none"> • Agreement by both parties of the importance of the abundance and long term survival of DLG; • That a research monitoring programme needs to be designed and funded, which includes input from Fish and Game, Te Roroa, Te Kuihi, KDC, NRC and DOC, and that a working group be set up for this purpose; and • That cessation of trout stocking in Lakes Taharoa and Waikare from 2018 would be deferred in light of new information received from NIWA (the April 2017 report), and provided the Committee is satisfied with progress with the research monitoring programme.
13 June 2017	First meeting of the Kai Iwi Lakes Dune Lake Galaxias Working Group (the Working Group).	<p>The Working Group discussed the following:</p> <ul style="list-style-type: none"> • Draft Terms of Reference; • Research questions that need answers – scientific and cultural knowledge and gaps; • It was noted that even collectively the group and the agencies represented therein do not have the resources for the 5-10 years of monitoring recommended in the NIWA April 2017 report; • It was suggested that NorthTec be contacted to explore the potential for involving their students in this research;

Date of Action	Action	Explanation
		<ul style="list-style-type: none"> • It was considered that it would be useful to identify seasonal changes in trout diet; • After some discussion into options for filling knowledge gaps, the Working Group agreed that the most pressing research needs (given the need to protect the DLG and given the limited resources of those involved) are as follows: <ul style="list-style-type: none"> - Better understand the ecology and life history of the DLG including where and when they spawn; - Explore control methods for mosquito fish; - Explore interactions between DLG and mosquito fish; • Drafting of the Dune Lakes Galaxias Monitoring Strategy; • Funding and resourcing options; • Reporting.
23 June 2017	The Committee confirmed the Terms of Reference for the Working Group.	<p>The Committee confirmed the Terms of Reference for the Kai Iwi Lakes Dune Lake Galaxia Working Group (Attachment 2).</p> <p>The Committee also permitted the release of trout in 2018. This was because of new information brought to light through the April 2017 NIWA report advising that the ambiguity over the effects of trout on the DLG population should be addressed before ceasing trout stocking. This was because of concerns that excluding trout from the Lakes could be detrimental to the DLG.</p>
01 August 2017	The Working Group recommend the draft Dune Lakes Galaxias Monitoring Strategy (the Strategy) to the Taharoa Domain Governance Committee	<p>The Working Group met to finalise the Strategy. This included:</p> <ul style="list-style-type: none"> • Agreeing on the research priorities; • Finalising the study design; • Agreeing on how the study would be resourced;

Date of Action	Action	Explanation
		The Working Group then recommended the draft Strategy to the Committee for implementation.
10 August 2017	The Committee endorsed the Dune Lakes Galaxias Monitoring Strategy	<p>The Committee resolved to endorse the Strategy as recommended by the Working Group.</p> <p>The Strategy identified that the three highest priorities for study are to:</p> <ol style="list-style-type: none"> 1. Better understand the ecology and life history of the DLG including their abundance and where and when they spawn; 2. Explore interactions between DLG, trout and Gambusia; and 3. Identify management options which will benefit the DLG. <p>To achieve these priorities, the Strategy includes the following key projects:</p> <ul style="list-style-type: none"> • Review reliable methods for estimating DLG and Gambusia abundance at various lifecycle stages; • Identify DLG spawning sites and timing; • Creating a population model for each species; • Observe interactive segregation between Gambusia and trout; • Seasonal study of trout diet; • Gambusia control; • Supporting studies e.g. monitoring of tuna (eels) and koura.
02 November 2017	The Kai Iwi Lakes Dune Lake Galaxias Working Group met to implement the Dune Lakes Galaxias Monitoring Strategy.	<p>The Strategy identified seven priority areas of study. The intention of this meeting was to discuss how these could best be actioned, which agency would take the lead on each, and how these could be resourced.</p> <ul style="list-style-type: none"> • DOC agreed to continue to take the lead on monitoring the abundance of DLG. This

Date of Action	Action	Explanation
		<p>included continuing the spotlighting programme, increasing monitoring around the suspected spawning season and trialling fyke nets;</p> <ul style="list-style-type: none"> • DOC would work with NorthTec to investigate using otoliths to determine the timing of spawning, including if Envirolink funding might be available; • NRC agreed to create a population model for each species; • NorthTec agreed to continue to investigate Gambusia behaviour, including possible interactive segregation between Gambusia and trout; • Fish and Game was asked to take the lead in a study of how trout diet varies seasonally; • KDC agreed to fund construction of some gee minnow traps to be used by DOC in implementing a Gambusia control programme; • Other supporting studies were also agreed to. These included: <ul style="list-style-type: none"> ○ NRC monitoring of water quality and environmental variables; ○ Fish and Game agreed to include tuna (eel) surveys alongside their trout monitoring; and ○ Te Roroa agreed to survey koura/kewai numbers using the traditional method of Tau Koura.
23 March 2018	Kai Iwi Lakes Dune Lake Galaxias Working Group meeting	<p>DOC reported that they had trialled fyke netting to get a more quantitative measure of DLG abundance, however this method had failed to prove effective. They decided to just continue with their spotlighting method. DOC agreed to increase the frequency of spotlighting surveys over the suspected breeding season in the hope of recording a spawning event.</p> <p>Fish and Game presented their findings to date from the trout diet monitoring programme they have been undertaking. They offered to extend this monitoring to include larval fish</p>

Date of Action	Action	Explanation
		<p>monitoring. The Working Group was supportive of this, recognising the opportunities it offered, including how it could link to the otolith study. It was agreed to seek approval for this from the Committee, particularly Mana Whenua.</p> <p>KDC presented the Gambusia traps they had constructed. These were later trialled by NorthTec who found them to be ineffective compared to standard gee-minnow traps.</p> <p>The Working Group continued to progress the otolith study, including preparing an application for funding from the Envirolink Fund and seeking approval from the Committee.</p>
10 May 2018	The Committee granted approval for the otolith study and trout releases.	<p>The Committee gave authorisation under section 50 of the Reserves Act 1977 for the Northland Fish and Game Council, NorthTec and DOC to take a sample of DLG from the Kai Iwi Lakes as part of their research. This was part of the otolith study.</p> <p>The Committee resolved to allow the release of trout in 2019. This was because the ambiguity over the effects of trout on DLG still remained unresolved and the Committee was satisfied with the Working Group's efforts to resolve this.</p> <p>The Committee indicated they would be open to Lake Kai Iwi being used to experiment with the interactions between trout and Gambusia. This created new opportunities for the Working Group when designing experiments.</p> <p>The Committee asked KDC staff to prepare in co-operation with Mana Whenua a draft Research Protocol that gives effect to kaitiakitanga rights.</p>
21 June 2018	Kai Iwi Lakes Dune Lake Galaxias Working Group meeting – the work progresses.	DOC reported their findings from the spotlight monitoring. They had not managed to record a spawning event but had added to the data set. The Working Group raised further concerns over the accuracy of this method. It was agreed that an independent statistical analysis of the data be undertaken (including comparing trends to

Date of Action	Action	Explanation
		<p>environmental variables) to better understand the accuracy of the method.</p> <p>Consideration was given to designing an experiment in which trout would either be released into Lake Kai Iwi or excluded from Lake Waikare and the effects on the Gambusia observed. It was agreed that Fish and Game, supported by other members, would do some work to look at the feasibility of such an experiment and possible experimental design. They would then report back to the next meeting so the group could discuss this project further.</p> <p>There was further discussion over the possibility of translocating DLG to establish another population to serve as a reserve in case experimental actions in the Kai Iwi Lakes resulted in their extinction there. NRC and DOC will continue working to progress this.</p> <p>Having gained approval from the Committee to proceed with the otolith study, the Working Group was working to get ethics approval and had submitted an application for funding to the Envirolink Fund.</p> <p>It was identified that none of the participants in the Working Group currently had the resources to undertake a Gambusia control programme.</p> <p>NorthTec was continuing to undertake studies into Gambusia behaviour and distribution in the Lakes.</p>
16 August 2018	Taharoa Domain Governance Committee meeting – The Committee requested a Research Protocol to guide the studies being done in the Lakes.	<p>When receiving a regular update on the work of the Working Group, the Committee requested more information on the work of the Working Group and how its projects had been developed and reported to the Committee. This report and the project timeline included within are an answer to this request for information.</p> <p>In addition the Committee directed the Chief Executive to report back to the Committee with a Research Protocol including:</p>

Date of Action	Action	Explanation
		<ul style="list-style-type: none"> • conflict of interest and external organisations; • clear Committee approval process; • monitoring and reporting strategy; • potentially intrusive research techniques; • alternative funding for the trout diet study; • Terms of Reference for the Dune Lakes Galaxias Working Group; and • research programme, update on current projects, and funding streams.
Present	Kai Iwi Lakes Dune Lake Galaxias Working Group updates.	<p>The Working Group is presently working to progress the following key projects:</p> <ul style="list-style-type: none"> • Seasonal study of trout diet: Fish and Game in partnership with NorthTec is continuing to undertake a study into how the diet of trout in the Lakes varies between seasons and in different aged fish. This will help to understand what effect the trout are having on the DLG and wider ecosystem. This study was intended to run for a year and is therefore due to be completed in December 2018/January 2019. Results can therefore be reported to the Committee's 12 February 2019 meeting. • Tuna (eel) monitoring: Fish and Game is continuing to regularly survey the tuna population in Lake Taharoa and Lake Waikare. This monitoring process does not harm the tuna. This study was intended to run for a year and is therefore due to be completed in December 2018/January 2019. <p>Review of DOC's spotlight monitoring method: DOC is currently reviewing the accuracy and effectiveness of their spotlight method for monitoring changes in the DLG population.</p> <p>Trout Experiment: The Working Group is exploring the possibility of undertaking an experiment to address the uncertainty over the effects of trout on the DLG and Gambusia populations.</p>

Date of Action	Action	Explanation
		<ul style="list-style-type: none"> • Translocating DLG: The Working Group is investigating the possibility of establishing a new population of DLG in another lake where they would be safe from trout and Gambusia. • Otolith study: The Working Group has been granted ethics approval for the otolith study and collection of a sample of DLG has commenced. This study uses otoliths (a bony structure in the ear/gill of the fish) to identify the population age structure of DLG and when they spawn. • Gambusia studies. NorthTec is continuing to undertake studies into the Gambusia population in the Lakes. This includes looking at the different habitats they use and depths to which they are found, including comparing behaviour between Lakes with trout and Lake Kai Iwi (which has no trout). • Annual Report on Findings: The Dune Lakes Galaxias Monitoring Strategy directs that the Working Group will prepare an annual report on the findings of its research. As November/December 2018 marks one year since the Working Group commenced its research initiatives, it is timely that the Working Group begins preparing this report. • Research Protocol: KDC staff have prepared a draft Research Protocol which gives effects to the kaitiakitanga rights of Mana Whenua. This is currently being reviewed by Te Roroa staff and will be discussed by the Working Group at their next meeting. <p>The Working Group's next meeting is scheduled for 23 November 2018.</p>

Issues

The Working Group is continuing to progress the projects detailed above. The Working Group will continue to meet as required to discuss progress on these projects, opportunities for collaboration and to reprioritise where needed. The findings of the Working Group's studies will be reported to the Committee as they become available via regular updates following each meeting of the Working Group. In addition, an annual report will be compiled presenting the findings to date.

Factors to consider***Community views***

The work of the Working Group represents progress towards protecting a threatened species and is therefore likely to be supported by the community.

Policy implications

The Working Group has a current Terms of Reference and their work is guided by the Dune Lakes Galaxias Monitoring Strategy which was endorsed by the Committee on 10 August 2017. The Strategy is the fulfilment of an action under the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP). It contributes to Aim 3 of the RMP: *"Complete knowledge about Kai Iwi Lakes will enable effective protection and enhancement of its natural environment and pristine waters."*

Financial implications

There are no financial implications for KDC.

Legal/delegation implications

There are no legal implications.

Next step

The Working Group will next meet on 23 November 2018. The progress of the Working Group will continue to be reported to the Committee. The draft Research Protocol will continue to be developed by Te Roroa and KDC staff with input from the Working Group before being presented to the Committee for adoption.

Attachments

1. Letter from Brookfields dated 05 May 2017
2. Terms of Reference for the Kai Iwi Lakes Dune Lake Galaxia Working Group
3. Dune Lakes Galaxias Monitoring Strategy

5 May 2017

EMAIL: brent@k3.co.nz

K3 Legal Limited
AUCKLAND

ATTENTION: Brent O'Callahan

WITHOUT PREJUDICE

KAI IWI LAKES (TAHAROA) MANAGEMENT PLAN (MANAGEMENT PLAN)

We refer to the meeting in Dargaville on 2 May 2017 between representatives of Northland Fish & Game Council (F & G), representatives of the Taharoa Domain Governance Committee (Committee), their respective legal advisors and other invited parties.

We confirm that the Committee is interested in exploring the proposal discussed at the meeting as follows:

1. The parties, including the Committee and Kaipara District Council (KDC), Northland Regional Council (NRC), the Department of Conservation (DOC) and F & G will design a research monitoring programme in respect of the fish at Kai Iwi Lakes, with a focus on factors influencing the abundance of dune lake galaxias (DLG), with a view to ensuring the long term survival of the DLG. It is anticipated that representatives of KDC, NRC, the Department of Conservation (DOC) and NIWA, together with appointed experts potentially including Dr David Rowe, would be involved in the research programme. Urgent efforts will need to be made to prepare a detailed monitoring and research programme and seek funding for it.
2. F & G will assist the monitoring programme and will provide full details in response to this letter as to the various ways in which it can assist this monitoring programme.
3. The Committee will defer cessation of trout stocking in Lakes Waikare and/or Taharoa from 2018 in light of the new information received from NIWA in its April 2017 report, and provided it is satisfied with progress in respect of 1 and 2 above. Any ultimate decision on the continued stocking of trout will likely be dependent on the results of the research monitoring programme.
4. Consideration will be given to an eel and/or koura restocking programme, with F & G's support.

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5. If a proposal can be agreed along these lines, then a joint press release will be made after 24 June 2017, which is when the next Committee meeting is scheduled.

As discussed, every effort needs to be made to have full details for this proposal agreed and in place by 24 June 2017. To that end, it may be desirable to set up a working group, particularly in relation to 1 and 2 above. The primary purpose of the proposed research monitoring programme should be to ensure that the scientific evidence available is acceptable as a reliable and responsible basis for future decision making by KDC and all bodies with relevant statutory obligations. Specifically, the research monitoring programme should produce a balanced and objective scientific assessment advising how best to balance the species in the lakes and to ensure the long term survival of the DLG.

We trust that this confirmation of the Committee's willingness to explore and develop further this proposal is sufficient for F & G to agree to defer issuing any court proceedings, at least until after 24 June 2017. Please confirm that this is the case.

If you have any queries, please do not hesitate to contact us.

Yours faithfully
BROOKFIELDS

David Neutze
Partner

Direct dial: +64 9 979 2169
email: neutze@brookfields.nz

Kai Iwi Lakes Dune Lake Galaxias Working Group
Terms of Reference

Affiliated Bodies	Department of Conservation Northland Regional Council Kaipara District Council Northland Fish and Game Te Roroa Te Kuihi
Status	Working Group
Title	Kai Iwi Lakes Dune Lake Galaxia – Working Group
Approval Date	
Support	Kaipara District Council

Purpose

The prime purpose of the Kai Iwi Lakes Dune Lake Galaxia Working Group is to ensure the long term survival and abundance of the Dune Lake Galaxia (DLG) at Taharoa Domain.

Output of the Working Group

The output of the Kai Iwi Lakes Dune Lake Galaxia Working Group is to make recommendations to Taharoa Domain Governance Committee (TDGC) and Kaipara District Council on management decisions for DLG at Kai Iwi Lakes based on scientific and cultural knowledge.

These recommendations will be based on the results of the proposed Fish Monitoring Programme. Creating and implementing the Fish Monitoring Programme is an output of the Working Group.

Reporting

Results and progress with the Fish Monitoring Programme shall be reported to TDGC at their meetings (approximately every two months). These reports shall also be available to the other members of the Working Group.

Membership Roles and Responsibilities of the Working Group

The roles and responsibilities of the members of the Working Group are as follows:

Member	Role	Responsibility
Department of Conservation	Technical input	Statutory responsibility for the conservation of threatened native species. Functions of the Department under the Conservation Act section 6 (ab): to preserve so far as is practicable all indigenous freshwater fisheries, and

Member	Role	Responsibility
		protect recreational freshwater fisheries and freshwater fish habitats.
Kaipara District Council	Facilitation Administration support	Administering body of Taharoa Domain Kai Iwi Lakes Reserve Management Plan 2016 Co-governance of the Domain.
Northland Regional Council	Technical input	Regional Policy Statement: safeguard and enhance the ecological integrity of indigenous freshwater ecosystems and seek an overall reduction in the threat status of threatened and at risk species.
Te Roroa	Kaitiaki (guardian) Cultural knowledge	Mana Whenua Co-governance of the Domain.
Te Kuihi	Kaitiaki (guardian) Cultural knowledge	Mana Whenua Co-governance of the Domain.
Fish and Game Northland	Technical input Local knowledge	Managing the trout population in the Lakes. Under the Conservation Act section 26Q (1): The functions of each Fish and Game Council shall be to manage, maintain, and enhance the sports fish and game resource in the recreational interests of anglers and hunters, and, in particular,— (a) to assess and monitor— (i) sports fish and game populations; and (ii) the success rate and degree of satisfaction of users of the sports fish and game resource; and (iii) the condition and trend of ecosystems as habitats for sports fish and game.

Funding and Resourcing

Each member of the Working Group shall nominate representatives to attend the meetings and to progress the Fish Monitoring Programme.

Each affiliated body shall endeavour to contribute to the funding of, and/or resourcing and implementation of the Fish Monitoring Programme. This is subject to an agreed programme that is affordable and is able to meet agreed goals and time frames.

Chair of the Working Group

The Working Group will select a Chair from amongst its members. The Chair is responsible for:

1. The efficient functioning of the Working Group, including ensuring members have the opportunity to contribute to group discussions;
2. Approving the Agenda for Working Group meetings;
3. Ensuring that all members of the Working Group receive sufficient timely information to enable them to be effective members; and
4. Presenting the Working Group's feedback to the respective organisations.

Quorum

The quorum at any meeting of the Working Group shall be not less than one member from each affiliated body.

Frequency of meetings

The Working Group shall meet as required at times to be agreed with the Working Group members, and meetings will be documented.

Delegations

The Working Group does not have any specific delegated powers from their respective organisations. It is an advisory body.

Background

Northland's Kai Iwi Lakes are the only home of the Dune Lakes Galaxias (a threatened native fish). Kaipara District Council, the administering body of the lakes, has decreed through its Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP) that the stocking of the lakes with trout is to cease from 2018, leading to the gradual extinction of trout in these lakes. As trout are known to predate the Dune Lakes Galaxias (DLG), it is hoped that their exclusion will result in an increase in the numbers of DLG. However, Gambusia (another introduced fish) are also present in the lakes. They are aggressive, are known to compete with DLG for food and habitat and are suspected to predate the DLG's young. It has been suggested that predation pressure from trout is keeping the population of Gambusia in check or at least is altering their behaviour sufficiently to allow the survival of the DLG. Furthermore, it has been suggested that environmental variability may also be responsible for some of the peaks and falls seen in the DLG population. It is therefore unknown if the exclusion of trout will be beneficial or detrimental to the DLG.

A recent literature review by Gee and Franklin (2017) suggested that the wholesale exclusion of trout from the Lakes, beginning in 2018 as is directed by the RMP, might potentially be detrimental to the DLG. The review goes on to make recommendations for a more comprehensive research programme.

This has led to the establishment of this Working Group to advise the final design of this research programme, oversee its implementation and make recommendations to the Taharoa Domain Governance Committee and Kaipara District Council. Recognising the complexity of this issue and the diversity of parties involved in the management of the lakes and the DLG, the working group shall consist of; the Department of Conservation, Northland Regional Council, Kaipara District Council, Northland Fish and Game, Te Roroa and Te Kuihi.

The Department of Conservation has a responsibility to undertake the conservation of threatened species such as the DLG. The Northland Regional Council has a statutory role under the Resource Management Act 1991 to safeguard the use of natural resources, including the Lakes. Furthermore, Objective 3.4 of the Northland Regional Policy Statement requires that Northland Regional Council safeguards and enhances the ecological integrity of indigenous freshwater ecosystems and seeks an overall reduction in the threat status of threatened and at risk species. Kaipara District Council is the administering body of the Taharoa Domain and is largely responsible for controlling what activities are permitted there; both through Bylaws and the RMP. Northland Fish and Game represent the interests of all hunters and anglers. As they are responsible for managing the trout population in the lakes, their involvement is essential. Te Roroa and Te Kuihi are two local iwi who both exercises mana whenua status over the lakes. Both these iwi have a strong connection to the lakes spanning many generations.

It is intended that these parties will combine their knowledge, strengths and resources to successfully design and implement a study which will allow advice to be given regarding what actions should be taken to protect the Dune Lakes Galaxias.

Dune Lakes Galaxias

Monitoring Strategy

Abstract

Northland's Kai Iwi Lakes are the only home of the Dune Lakes Galaxias (DLG) (a threatened native fish). To ensure the survival of this species it is necessary to better understand its ecology and its interactions with other species. In particular, the DLG shares the lakes with two introduced fish species; trout and Gambusia (Gee & Franklin 2017). As trout are known to predate the DLG, it has been suggested that their removal will result in an increase in the numbers of DLG (Gee & Franklin 2017). However, Gambusia are also a threat. They are aggressive, are known to compete with DLG for food and habitat and are suspected to predate the DLG's young (Rowe 1998; Pingram 2005). It has been suggested that the threat of predation by trout is keeping the population of Gambusia in check through interactive segregation (Rowe, Champion & de Winton 1999). It is therefore, unknown if the exclusion of trout will be beneficial or detrimental to the DLG.

In addition, other questions have also been raised over to what extent environmental conditions and the extent of littoral vegetation may be affecting the abundance of DLG. DLG abundance has been found to vary considerably from year to year. The relative effects of environmental variables and interactions with other species will need to be understood before management actions to protect this species can confidently be taken.

This study seeks to explore the ecology of the DLG, its interactions with other species and its environment. It is hoped that the understandings gained through this study will advise management actions which will help conserve this species. The study design is based on the recommendations of a recent literature review by Gee & Franklin (2017), advice from a number of independent scientists, input from staff from the key agencies involved in managing the fish populations of the Lakes and has also been informed by the principals of mātauranga māori (indigenous Māori knowledge).

1 Introduction

The Dune Lakes Galaxias (*Galaxias sp.*) (here after referred to as the DLG) is currently recognised as a subspecies of dwarf inanga (*Galaxias gracilis*), however work is currently being undertaken to describe it as a separate species. The DLG is endemic to the three Kai Iwi Lakes (Taharoa, Waikare and Kai Iwi) on the west coast of Northland, New Zealand (Allen & Turner 1971).

Rainbow Trout (*Oncorhynchus mykiss*) were introduced to the Kai Iwi Lakes in 1968 by the then Acclimatization Society; now the Northland Fish and Game Council (Anon 1973; McEwan 2016). Regrettably, within a few years of trout being released, an unauthorised individual released Gambusia (*Gambusia affinis*) into the lakes as well (Gee & Franklin 2017). It is understood the individual intended the Gambusia to be a food source for the trout.

The introduction of these two species soon resulted in an observable decline in the numbers of DLG (Anon 1973; Gee & Franklin 2017). Since then DLG have become extinct in Lake Kai Iwi and there are concerns for the survival of the remaining populations in Lake Waikare and Lake Taharoa (Gee & Franklin 2017).

In response to this problem, Te Kuihi and Te Roroa (local iwi), Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation are seeking to identify what actions can be taken to save this species.

One of the management solutions proposed was to cease releasing trout into the lakes. This is a comparatively simple solution because, as trout cannot breed in the lakes (they require flowing water), the population would naturally die out if the annual stocking of trout fingerlings was to cease (Kaipara District Council 2016; Gee & Franklin 2017). As trout are a predator of DLG it was hoped that removing the trout would result in an increase in the population of DLG (Kaipara District Council 2016).

However, the *Gambusia* are a complicating factor. They are known to compete with the DLG for habitat and food and are suspected to predate the DLG's young (Gee & Franklin 2017). Hence while some studies have hypothesised that removing trout will result in an increase in the DLG population through removal of a predator (e.g. Rowe and Chisnall 1995 and Allen and Turner 1971), others (e.g. Rowe 1998 and Rowe, Champion & de Winton 1999) have argued that the trout are also keeping the *Gambusia* population in check through interactive segregation (i.e. *Gambusia* do not use the full range of habitats for fear of predation by trout). This leads to the competing hypotheses that exclusion of trout could result in an increase in *Gambusia* and a consequent decline in the population of DLG (Rowe et al. 1999). To complicate matters further, it has been suggested that environmental factors, such as the extent of littoral vegetation, rainfall, lake levels, water temperature and the abundance of zooplankton may also be significant contributors to fluctuations in the populations of both DLG and *Gambusia* (Gee & Franklin 2017).

Because of this uncertainty, a recent literature review by Gee & Franklin (2017) recommended that trout stocking not be ceased immediately but rather that a detailed study be designed and undertaken which recognises these competing hypotheses as well as the underlying environmental variability.

A working group comprising Te Kuihi, Te Roroa, Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation has identified that the three priorities for this study are to:

- 1 Better understand the ecology and life history of the DLG including their abundance and where and when they spawn. The design of this study and especially the outcomes sought will be clearly linked to possible management actions;
- 2 Explore interactions between DLG, trout and *Gambusia* e.g. do *Gambusia* exclude DLG from their preferred habitat, compete with them for prey, predate their young or force the DLG to spend more time in parts of the lake inhabited by trout? Do trout have an interactive segregation effect on *Gambusia*? How great is trout predation pressure on DLG?
- 3 Identify management options which will benefit the DLG e.g. this could include control of *Gambusia* or altering the release patterns for trout.

This study will therefore seek to better understand the ecology of the DLG, its interactions with other species, the effect environmental variables have on its survival and actions which can be taken to protect it.

The findings of this study are needed by the managers of these lakes (Kaipara District Council and Local Iwi) and the fish populations therein (Northland Fish and Game Council and the Department of Conservation) to guide management decisions (Kaipara District Council 2016).

Due to the complexity of this matter, this strategy shall be a working document and will be updated and further refined as new information comes to light. For this reason, the strategy has been kept reasonably high level at this stage rather than drilling down into detail over methods and deliverables. The Working Group shall continue to refine the individual actions of the study as it progresses.

2 Research Design and Methods

The research design is desired to draw on both mātauranga māori (indigenous Māori knowledge and epistemologies) and western science approaches to generating knowledge. The execution of the study shall therefore be informed by a soon to be commissioned Cultural Report.

This research will support cultural values by incorporating traditional Maori collection methods to complement more widely used scientific monitoring tools. This study will use whakaweku (bracken fern bundles) which is a component of Tau Koura, a traditional harvesting method used by tangata whenua of Te Arawa and Ngati Tuwharetoa. The Tau Koura method has been successfully used as a monitoring tool for koura (freshwater crayfish, *Paranephrops planifrons*) in the Te Arawa Lakes (Kusabs and Quinn, 2009), however recent studies have shown that this can be an effective monitoring tool for freshwater fish species in shallow lake fringes and running stream habitats (Kusabs, in press). We also intend to adapt this method and use whakaweku as an artificial habitat for DLG to see if they use this habitat at any particular time in their lifecycle or whether they utilise this as a spawning substrate. This method produced initial positive results as an effective spawning habitat for inanga species in a trial conducted in the lower Waipoua River (Taylor pers. com., 2017). By incorporating this method into the design we can actively introduce a Mātauranga Maori element into this proposal.

This study has been informed by recommendations from Gee & Franklin (2017), the findings of other previous studies and advice from a number of independent scientists. The study will consist of:

2.1 **Review reliable methods for estimating DLG and *Gambusia* abundance at various lifecycle stages**

Why? - Without this understanding we cannot measure the effects of any treatment.

Research questions:

- What is an effective method for estimating DLG abundance?
- What is the population size and trend for all species in the Lakes which do and do not undergo manipulations?

Problems:

- For each method of estimating abundance it needs to be asked; is it destructive or non-destructive, especially to DLG?
- Even given a reliable method of relative abundance estimate, how will inter-annual variability be accounted for in a scenario where a manipulation is involved (e.g. destocking trout, trout stocking numbers progressively lowered, *Gambusia* control). Natural inter-annual variability may mask the year-to-year effects of a manipulation.
- It could also be that what is currently perceived as “inter-annual variability” is actually a function of the difficulty of measuring the abundance of a rare species with a correspondingly patchy distribution. If this is the case, a more reliable monitoring method may better reveal the true extent of any actual inter-annual variability. Eleanor Gee notes, “In the datasets I looked at (primarily Pingram/DoC, but also Rowe 1999), the variability in catch/observation numbers throughout the year and from year to year made it hard to have confidence in estimation of numbers.” (Eleanor Gee, pers. comm.).

Research approaches:

- Gee minnow trap transects give a catch per unit effort (CPUE) for *Gambusia*, giving a standardised estimate of abundance.
- DLG have been assessed using plankton nets for larvae, and fyke nets for later stages. Each of these is destructive (some or all of the fish caught are killed). Visual assessment by snorkel survey or on-shore observation has also been used in the littoral zone and is non-destructive.
- Camera transects could be set up reasonably affordably using a Go-Pro Camera.
- A mark-recapture approach might give a reliable estimate.
- A new monitoring method based on traditional Maori fishing practices is being developed. It is understood this method is non-destructive and, if successful, could be applied to the DLG. This method would be very affordable and could be useful as a preliminary study.
- Inter-annual variability might be monitored by doing a manipulation in only one lake (Waikare) and observing the population modes in Taharoa to account for effects of environmental drivers. The two lakes are not comparable units, but environmental effects should be seen in pattern if not in magnitude.
- Environmental DNA could be used as a monitoring method, however this is an expensive method.
- Acoustic dopplers (fish finders) could be used to monitor the abundance of DLG providing they can distinguish between species.
- As we know DLG numbers are potentially both difficult to quantify and temporally variable across years, any response to a manipulation would need to allow several years to determine if the population will rebound or not.

2.2 Identify DLG spawning sites and timing

Why? - The location and timing of DLG spawning using straw bales or bundles of bracken fern as an artificial substrate is prompted by a hypothesis that lower water levels in the lakes result in less reed bed being available for spawning in the littoral margin. Whether that is relevant or not, understanding

the timing of spawning in each lake will provide information into the population model (see 2.3 below) and it will inform manipulation such as the timing of release of trout.

In terms of the driving hypothesis, NRC long term lake level data shows an increase in water level trend for Lake Waikare and a decrease for Lake Taharoa. Lake Taharoa has had a 30+ year relatively stable period of water level with a drop apparent as of mid-2013. This would mean that the reed beds had time to recolonise from initial water level drops since 1980. Waikare would not be subject to the hypothesis of lost reed belt.

Research questions:

- Is lake level responsible for loss of reed belt habitat for DLG spawning?
- Do DLG spawn on the reed belt?
- Do DLG spawn on other plant species at a lower zone in the lake?
- What is the period of DLG spawning in each lake and when is peak spawning?

Problems:

- The cause of recent water level decline in Lake Taharoa needs to be determined.
- Spawning success was not the problem in the Rowe (1997) study, recruitment to adult phase was.

Research approaches:

- Use straw-bales or bundles of bracken fern to promote spawning in a known area to determine timing of spawning.
- At determined time of spawning, survey reed belts and submerged plant zones for sign of eggs.
- Examine historic photographs for reed belt extent and position.
- Assess the effect of the canal between Lake Taharoa and Lake Kai Iwi for its effect on water level in Lake Taharoa.

2.3 Creating a population model for each species

Why? – The timing of lifecycle stages (e.g. what time of year the fish spawn and at what age they reach certain size class) and their distribution is critical towards understanding the usefulness of interventions. As information becomes available from other studies in this Strategy, this can be added to the model (e.g. DLG spawning timing, predation removal rates by trout, etcetera). Models are flexible and can be altered as new information becomes available. This population model shall therefore be compiled over time as various aspects of the necessary data become available through other aspects of this study.

Research questions:

- What is the timing of lifecycle stages of each species (DLG, trout and Gambusia)?
- What is the spatial distribution leading to interactions between each species?
- How does spawning differ across the Lakes?
- What are the preferred prey of each species and are they exclusive at various lifecycle stages of the predator?
- What is the role of phytoplankton and zooplankton in driving the food web?
- How does trout condition/growth-rate back-calculate in terms of prey consumed?

Problems:

- Models are only as good as the input data. Acquiring the input data may be expensive. It is therefore intended that the data for the model shall be compiled as it comes to light through implementing other aspects of this study.

Research approaches:

- Employ a modeller to build the model from simple to complex.
- Reprioritise other research to the needs of the model.
- Baker and Rowe have already completed a study looking at competition for food between riverine inanga and Gambusia. The results of this study can be reviewed and potentially fed into the model.

2.4 Observe interactive segregation between Gambusia and trout

Why? – If the presence of trout in the Lakes is forcing an interactive segregation approach on the Gambusia, then removing the trout could cause a boom in the Gambusia population. This in turn could impact negatively on the DLG. Mesocosm studies of interactive segregation were proposed by Dave Rowe. Nick Ling notes that mesocosm studies are confounded by lack of habitat complexity and small spatial scale that greatly exacerbates interactions. The design of the study should therefore consider such aspects as scale and habitat availability.

Research questions:

- Does the presence of trout cause Gambusia to seek refuge in littoral vegetation?
- If so, does being crowded into the littoral zone cause Gambusia to predate their own young?

Problems:

- Mesocosm studies are costly and can be artificial compared to interactions in the wild.

Research approaches:

- Interactive segregation would be tested by Gambusia transects of depth and distance from shore. Ideally the test should be undertaken in the same lake to exclude other variables. This could be done by introducing trout into a lake which has an established Gambusia population and observing Gambusia behaviour before and after the trout are introduced. Lake Kai Iwi or Shag Lake could be possible study sites. Furthermore, Fish and Game also have a lake/pond which could be used.
- Conversely, Lake Waikare could be used with observations made in the current trout presence compared with observations made after de-stocking the lake of trout. This would essentially be repeating the late 1990s Rowe experiment. If Gambusia move deeper and further out in the absence of trout, there is a case for this hypothesis.

2.5 Seasonal study of trout diet

Why? – Predation by trout on DLG and common bully (*Gobiomorphus cotidianus*) is a known impact. Initial declines of DLG were noted in the late 1960s when trout were first released, but Gambusia had yet to fully establish. Predation by trout on Gambusia has not been documented. If a population model is to be developed, we need to know the total removal of each species/trout/day/seasonal month. Since trout change prey preference by season and age; an understanding of their energy budget by species

will inform a population model. Better understanding at what times of the year and at what size trout show a preference for certain prey species may help inform management decisions such as at what time of the year or at what size trout should be released.

Research questions:

- What prey do different size/age classes of trout prefer and is this exclusive?
- What prey species do trout show a preference for at different times of the year?
- What lifecycle stages of DLG are predated on by trout, when and what level?
- Where in the lake is this predation occurring?
- Do trout eat Gambusia, when and where and what size/age class of trout prey on them? Is this sufficient predation pressure to reduce Gambusia populations?

Problems:

- Visual gut analysis is hampered by some prey material being digested or fractured. This makes identification of prey difficult and it makes a count by prey species impossible.
- Trout caught in different depths, different offshore distances and at different times of day may have different prey composition in gut content. Trout of different age/size classes have different prey preference.
- Relying on angler-caught trout for this study gives no statistical confidence and is random as to catch depth/offshore distance.
- Assumptions of “some” predation should not be taken as an impact on population levels of Gambusia, or even DLG for that matter. We need to quantify removal rates to see true impact.

Research approaches:

- As the diet and seasonal feeding behaviour of trout is well studied, a general understanding of the seasonal variation of trout diets in the Kai Iwi Lakes could likely be gained from a literature review. This review could also provide information on how trout diet varies across size classes. Such a review would likely be reasonably in-expensive and could be followed by field studies if needed, possibly using the following approaches:
- Use otoliths as a species ID and number estimate.
- Use genetic identification for all species consumed. This requires reference genome of all likely prey species (including insects and fish).
- Use fatty acid signatures to identify all species consumed. Requires reference samples of all species.
- Conduct monthly surveys for one year by catching a statistically meaningful number of trout from standardised transects of depth and offshore distance and time of day and at several size classes of trout, based on literature of prey preference at age/size.
- Concentrate study of Gambusia predation by trout in summer and autumn due to peak Gambusia numbers.
- Use isotope analyses to look at food web interactions.
- Fish and Game should be able to provide all historic trout release and catch return (condition, size, age, weight) data to assess stocking rates vs condition index.

- Review literature for information on trout diet at size/age. Is *Gambusia* ever recorded? Does piscivorism cease completely after trout are yearlings?

2.6 *Gambusia control*

Why? – *Gambusia* are hypothesised to affect DLG. This may be occurring by resource competition for food, from aggression-related displacement from key habitat (vegetated littoral zone), from attacks leading to death (fin pecking) and from eating of DLG eggs.

Gambusia are prolific breeders, with a single female at the start of the breeding season (November) giving rise to nearly quarter of a million more fish by the end of the season (March). Therefore, any control attempts are best made prior to the breeding season and at the end of the season, in order to reduce numbers of breeding females from the population. This should reduce pressure on DLG.

Research questions:

- Do *Gambusia* solely inhabit the vegetated littoral zone in Lakes Waikare and Taharoa?
- As *Gambusia* are both light and heat attracted, can modifications to Gee minnow traps including these features increase capture rate?
- Are DLG less apt to enter a minnow trap?

Problems:

- *Gambusia* may still reproduce in numbers sufficient to have an impact.
- *Gambusia* distribute to 9m depths in Kai Iwi requiring traps set over a wider area.
- Common bully may enter traps.
- DLG may enter traps if trialled in Lakes Waikare and Taharoa (although Pingram found they did not).

Research approaches:

- Trialling control methods are best done in Lake Kai Iwi as there are no DLG.
- Use heat and light as an attractant.
- Trial flow as an attractant as it may be possible to “vacuum up” large numbers of fish if it does prove successful.
- Trail brown bread baits.
- Trial daytime only trapping in lakes with DLG as it is understood adult DLG are absent from the shallows during the day.
- Combine any de-stocking of trout in Lake Waikare with *Gambusia* control to minimise pressures on DLG.

2.7 *Supporting studies*

Depending on the availability of funding and the potential for involving PHD and Masters students, there are also a number of supporting studies which could be incorporated into the overall study design. These could include exploring the potential for translocating DLG to establish a new population in a lake which has no *Gambusia* or trout. This will provide an additional refuge for the species should the populations in the Kai Iwi Lakes fail.

It would also be advantageous to monitor changes in the populations of other species, particularly the eels (*Anguilla dieffenbachii* and *Anguilla australis*) and koura (*Paranephrops*) (Gee & Franklin 2017). This could be undertaken annually using gill or fyke netting for the eels and bundles of bracken fern (after the method of Kusabs & Quinn 2009) for the koura to record catch per unit effort (Gee & Franklin 2017). This monitoring could be undertaken by local iwi who have an interest in harvesting these species and a desire to exercise their mana whenua status over the Lakes.

3 Timetable

By December 2017 it is hoped to have completed working with the various parties involved to agree on:

- A monitoring programme for 2018 – including the scope, who will undertake it and how it will be funded.
- A final design for the study.

4 Funding

This research will be undertaken collaboratively by Te Kuihi and Te Roroa (local iwi), Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation with each contributing as they are able and in accordance with their strengths and statutory obligations. Contributions may be in cash or in kind. In addition, external funding shall also be sought as will collaborative arrangements with research institutes and education providers such as NorthTec.

5 Presentation

Study results are to be made available to all parties as they become available.

A written annual report on monitoring results and the progress of the study is to be prepared, circulated to all parties and made available to the public. This could be combined with the regular lake reporting currently undertaken by the Northland Regional Council.

The results of the study are to be presented within five years as a written report outlining the findings and recommendations for future monitoring, management actions and study.

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Closure

**Kaipara District Council
Dargaville**