

I hereby give notice for the following meeting

<b>Meeting:</b>	<b>Taharoa Domain Governance Committee</b>
<b>Date:</b>	<b>Thursday 10 August 2017</b>
<b>Time:</b>	<b>02.00 pm</b>
<b>Venue:</b>	<b>Northern Wairoa War Memorial Hall, Hokianga Road, Dargaville.</b>

## **Open Agenda**

### **Membership**

Chair: Councillor Andrew Wade

Members: Messrs Alan Nesbit and Ric Parore, Mayor Greg Gent

### Staff and Associates:

Chief Executive, General Manager Community, Parks and Community Manager, Financial Accountant, Democratic Services Manager (minutetaker).

**Seán Mahoney**  
**Democratic Services Manager**

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**Ordinary Meeting Taharoa Domain Governance Committee**

**Thursday 10 August 2017**

**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/Commissioner 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 Minutes of Previous Meeting**

#### **3.1 Taharoa Domain Governance Committee Minutes 23 June 2017**

**Democratic Services Manager                      1606.16/June**

#### **Recommended**

*That the Minutes of the Taharoa Domain Governance Committee meeting on 23 June 2017, be confirmed as a true and correct record.*

## Minutes

<b>Meeting</b>	Taharoa Domain Governance Committee
<b>Date</b>	Friday 23 June 2017
<b>Time</b>	10.30 am
<b>Venue</b>	Lake Waikare Event Centre, Taharoa Domain
<b>Status</b>	Draft

### Membership

Chair: Councillor Andrew Wade

Members: Messrs Alan Nesbit and Ric Parore, Mayor Greg Gent

### Staff and Associates:

Chief Executive, General Manager Community, Parks and Community Manager, Financial Accountant, Democratic Services Manager (minute-taker).

**Seán Mahoney**  
**Democratic Services Manager**

1606.16/June

TDGC minutes 23 June 2017 draft

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**Ordinary Meeting Taharoa Domain Governance Committee**
**Friday 23 June 2017**
**1 Opening – 10.45am**
**1.1 Karakia**

Alan Nesbit opened the meeting with a karakia.

**1.2 Present**

Councillor Andrew Wade (Chair), Messrs Alan Nesbit and Ric Parore, Mayor Greg Gent.

**In Attendance**

Name	Designation	Item(s)
Graham Sibery	Chief Executive	All
Venessa Anich	General Manager Community	All
Shelley Paniora	Executive Assistant	All (minute-taker)

**Adjournments**

Nil

**Absences**

Nil.

**1.3 Apologies**

Nil.

**1.4 Confirmation of Agenda**

The Committee confirmed the Agenda.

**1.5 Conflict of Interest Declaration**

Name	Interest
Greg Gent	Deputy Chair of Plant and Food Research

**2 Deputations and Presentations**

Nil

### **3 Minutes of Previous Meeting**

#### **3.1 Taharoa Domain Governance Committee Minutes 04 April 2017**

Democratic Services Manager                      1606.16/April

**Moved        Gent/Parore**

*That the Minutes of the Taharoa Domain Governance Committee meeting on 04 April 2017, be confirmed as a true and correct record.*

**Carried**

### **4 Operational**

#### **4.1 Taharoa Domain Operations Update: April/June 2017**

Parks and Community Manager                      4702.24.02.02

**Moved        Gent/Parore**

*That the Taharoa Domain Governance Committee:*

- 1     *Receives the Parks and Community Manager's report 'Taharoa Domain Operations Update: April/June 2017' dated 12 June 2017 and the information contained therein; 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     *Supports calling for Expressions of Interest for concessionaires to operate over the 2017/2018 summer at Taharoa Domain; and*
- 4     *Adopts the 2017 Communication Plan.*

**Carried**

#### **4.2 Taharoa Domain: Financial Report for 11 month ended 31 May 2017**

Financial Services Manager                      4702.24.02.01

**Moved        Parore/Nesbit**

*That the report 'Taharoa Domain: Financial Report for 11 months ended 31 May 2017' prepared by the Financial Services Manager be received.*

**Carried**



#### 4.3 Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022

Financial Services Manager 4702.24.02.01

**Moved Gent/Parore**

*That the Taharoa Domain Governance Committee:*

- 1 *Receives the Parks and Community Manager's report 'Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022' dated 12 June 2017 and the information contained therein; 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 *Adopts the draft Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022; and*
- 4 *A briefing will occur with the Taharoa Domain Governance Committee so that their input can be included in the Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022 and Infrastructure Plan.*

**Carried**

#### 4.4 Kai Iwi Lakes Fish Monitoring Programme

General Manager Community 4702.24.05

**Moved Gent/Nesbit**

*That the Taharoa Domain Governance Committee:*

- 1 *Receives the General Manager Community's report 'Kai Iwi Lakes Fish Monitoring Programme' dated 15 June 2017; 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 formation of the multi-agency Kai Iwi Lakes Dune Lake Galaxias Working Group who are compiling the proposed Fish Monitoring Programme, and thanks each agency for their support; and*
- 4 *Supports and confirms the Terms of Reference for the Kai Iwi Lakes Dune Lake Galaxia Working Group (**Attachment 1** to the above-mentioned report); and*
- 5 *Supports the release of trout in 2018. This is based on concerns expressed in the April 2017 NIWA report to the effect that it would be advisable to address the ambiguity over the effects of trout on the Dune Lake Galaxia population before ceasing trout stocking, and that further research proposed by the Fish Monitoring Programme is desirable to*

*better understand that relationship; and*

- 6 *Reserves the right to control how trout are released in 2018, based on knowledge from the proposed Fish Monitoring Programme; and*
- 7 *Requires the Kai Iwi Lakes Dune Lake Galaxias Working Group to provide regular updates on the proposed Fish Monitoring Programme, and will make these updates available to be shared with the other groups involved; and*
- 8 *That an independent peer review of the Fish Monitoring Programme occurs and that this review is presented to the Taharoa Domain Governance Committee for approval.*

**3 in favour, 1 against Carried**

#### **4.5 Biosecurity Plan – Myrtle Rust**

**Parks and Community Manager 4702.24.02.02**

**Moved Parore/Gent**

*That the Taharoa Domain Governance Committee:*

- 1 *Receives the Parks and Community Manager's report 'Biosecurity Plan – Myrtle Rust' dated 12 June 2017 and the information contained therein; 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 *Adopts the Biosecurity Plan – Myrtle Rust dated 23 June 2017.*

**Carried**

**5 Closure**

The meeting concluded at 11.55am.

**Confirmed** .....  
**Chair** .....

**Kaipara District Council**  
**Dargaville**

draft

## 4 Operational

**File number:** 4702.24.02.02 **Approved for agenda**   
**Report to:** Taharoa Domain Governance Committee  
**Meeting date:** **10 August 2017**  
**Subject:** **Taharoa Domain Operations Update: July/August 2017**  
**Date of report:** 31 July 2017  
**From:** Sue Hodge, Parks and Community 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 April/June 2017 and future actions that deliver on the six Aims in the RMP.

**Aim 1: Collaboration**

Total volunteer hours will be 280 from two people undertaking community services.

**Aim 2: Cultural**

We are still awaiting a reply from Te Roroa and Te Kuihi regarding the draft brief for the development of a Cultural Impact Assessment (CIA).

Details of the multi-agency Fish Monitoring Programme Working Group and the Northland Regional Council (NRC) work programme that contributes to the restoration and monitoring of the natural environment are in a separate report.

**Aim 3: Environment**

The habitat restoration programme is running a little later this year and the focus has been on planting near the main entrance to the Domain.

**Aim 4: Recreation**

The 2016/2017 Taharoa Domain capital budget (\$100,000) was 100% spent and Kai Iwi Campgrounds improvements 92% completed including purchasing a portacom office and overnight manager's accommodation.

Kai Iwi Lakes as a hub for wider walking and cycling has been included as a project in the draft Kaipara Walking and Cycling Strategy including linkages out to a proposed Dargaville to Donnelly's Crossing cycleway.

After Iwi approval for the route, work began at the end of July on the Lake Waikare 3m wide service track loop and shared walking/cycling track.

There was only one event held at Lake Waikare Event Centre during the period; Elderly Day Out.

**Aim 5: Economic Development**

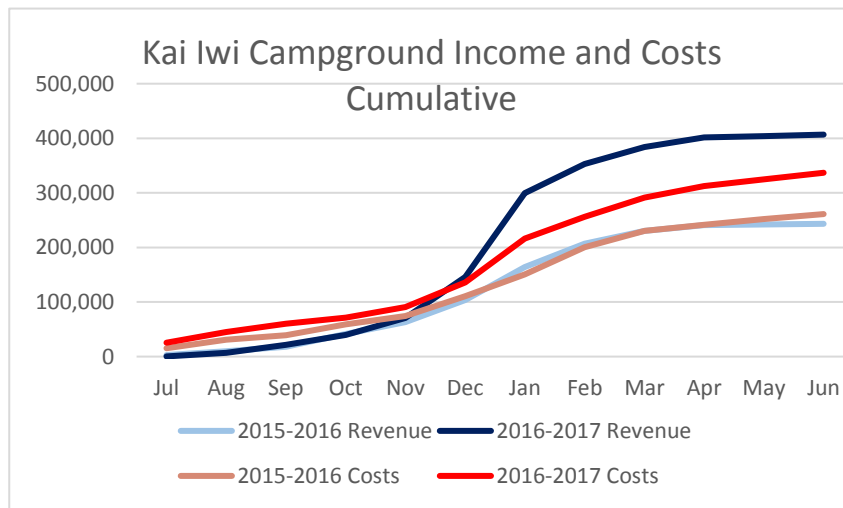
Details of the future promotional strategy are included in a separate report in this agenda.

Options for an Infrastructure Development Plan and implications for the Annual Plan 2017/2018 and Long Term Plan 2018/2028 works programme have been developed and will be presented to the next Committee meeting once Council has reviewed overall financial contribution funding.

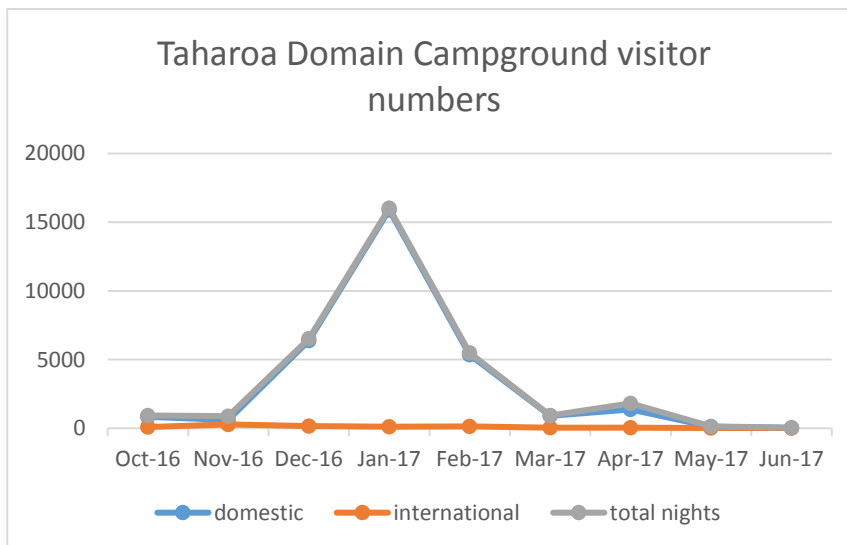
**Aim 6: Resourcing**

One of the objectives of this aim is to manage the finances in a business-like manner. In line with this Kai Iwi Lakes campgrounds were included in a Council-wide audit of cash handling carried out by PricewaterhouseCoopers (PwC). Good progress is being made to implement the recommendations.

Below is a graph of revenue and costs for the 2015/2016 and 2016/2017 financial years.



Below is a table of occupancy October to June:



Expressions of Interests (EOI) for concessionaires will be advertised in late August. Due to the interest in manuka honey it is recommended that the EOI include expressions of interest to locate beehives at the Domain as a potential revenue stream for the restoration of the Lakes.

Consent is sought from the Committee to exceed the Promenade Point campground capacity for the night of Thursday 23 November 2017 to accommodate Kings College who plan to have 123 boys and 30 adults camping. This is an annual visit and the toilets can cope with this overnight demand.

### **Recommendation**

*That the Taharoa Domain Governance Committee:*

- 1 *Receives the Parks and Community Manager's report 'Taharoa Domain Operations Update: July/August 2017' dated 31 July 2017 and the information contained therein; 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 *Supports calling for Expressions of Interest for locating beehives at the Domain; and*
- 4 *Supports permitting 123 boys and 30 adults, therefore exceeding the 100 person capacity, at Promenade Point campground Thursday 23 November 2017 to accommodate Kings College.*

### **Reason for the recommendation**

To ensure the Committee is informed about relevant the implementation of the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan and information regarding the ongoing Domain and campgrounds operations.

### **Reason for the report**

To present the operational report for the Kai Iwi Lakes (Taharoa Domain) for the July/August 2017 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.

## Kai Iwi Lakes (Taharoa Domain) operations update

The following is a brief summary of activities, operations and maintenance work carried out over the months of July/August 2017 that deliver on the six Aims in the RMP:

### **Aim 1: Collaboration**

*This aim is for Kai Iwi to be co-governed and to inspire others to share in its care.*

To measure “inspire others to share in its care” total volunteer hours are being recorded for the 2017/2018 financial year.

Currently there are two people working off their community service hours at the Lakes; one has 200 hours and one has 80 hours. They are both assisting with the acacia pest plant removal.

Organisation/Event	Hours	Accumulative hours 2017/2018
Community Service	280	280

### **Aim 2: Cultural**

*This aim is to ensure the relationship of tangata whenua and other people, their history, culture and traditions are reflected in how the lakes are developed and cared for.*

We are still awaiting a reply from Te Roroa and Te Kuihi regarding the draft brief for the development of a Cultural Impact Assessment (CIA). The purpose of the CIA is to understand the effects on Te Roroa and Te Kuihi and their cultural values of implementing the RMP. Once the CIA brief is finalised Council will engage a suitably qualified person to complete the assessment.

The RMP provides for the RMP implementation to be influenced by the outcome of the CIA.

Details of the multi-agency Fish Monitoring Programme Working Group are in a separate report.

Details of the Northland Regional Council (NRC) restoration and monitoring work programme are in a separate report.

### **Aim 3 Environment**

*This aim is to complete knowledge about the lakes to enable effective protection and enhancement of its natural environment and waters.*

Details of the biodiversity work being undertaken and an update on the Kai Iwi bylaw process is in a separate NRC report.

The habitat restoration programme is running a little later this year due to a delay until late June for the decision on planting myrtles and the non-stop rain. The focus has been on planting near the main entrance to the Domain and more recently on planting groups of kowhai around Lake Kai Iwi and Lake Taharoa.





As part of the planting programme it is planned to replace the temporary waratah fences near the main entrance with bollards. The purpose of the bollards is to protect plants by restricting vehicle access.

#### ***Aim 4 Recreation***

*This aim is to have a diverse range of recreational activities available for visitors compatible with the cultural and ecological values of the lakes.*

One of the objectives of the RMP is to position Kai Iwi Lakes as a hub for wider walking and cycling linkages. This idea has been included in the draft Kaipara Walking and Cycling Strategy including linkages out to a proposed Dargaville to Donnelly's Crossing cycleway.

Council and Iwi have investigated the route for the Lake Waikare service track loop and shared walking/cycling track. This is part of a 3m wide service track network throughout the Domain for maintenance and access for emergency services. Work began 31 July 2017.



#### ***Capital Works***

The options for a 10 year Infrastructure Development Plan, including the 2017/2018 capital works programme are contained in the Infrastructure Plan report. However, commitments have been made for service track (\$40,000) and bollards at the main entrance (\$10,000) from the \$100,000 Domain budget and \$15,000 for office site works from the Kai Iwi Campgrounds budgets.

#### ***Health and Safety***

There have been no Health and Safety issues.

## Events

The only event held this month has been the Elderly Day Out.

## Aim 5 Economic Development

*This aim is to promote and develop the lakes as an educational, scientific and tourist destination*

An update on the Promotion Work Plan is detailed in a separate report.

Options for a 10 year Infrastructure Development Plan with new/extended visitor facilities and recreational opportunities are detailed in a separate report.

## Aim 6 Resourcing

*This aim is to ensure the lakes and its promotion encourage a spectrum of resources that support its stewardship.*

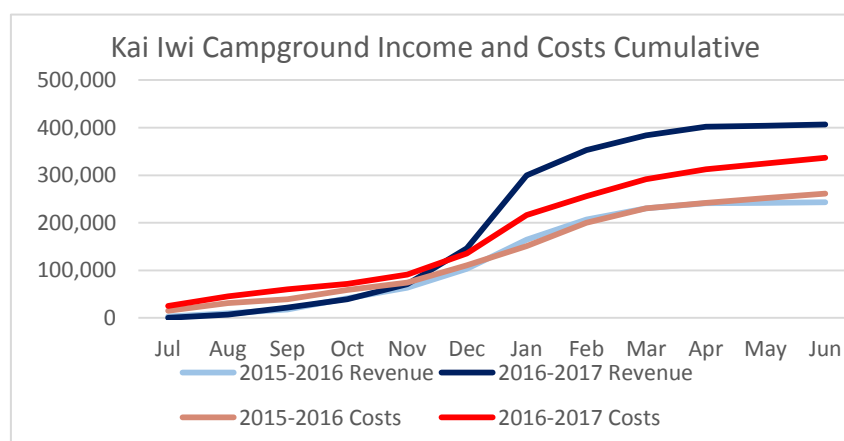
Expressions of Interests (EOI) for concessionaires will be advertised in late August.

Due to the interest in manuka honey it is recommended that the EOI include expressions of interest to locate beehives at the Domain as a potential revenue stream to fund the habitat restoration.

To ensure the campgrounds are operating in a business-like manner, a Council-wide audit of cash handling has been carried out by PricewaterhouseCoopers (PwC) and the following actions are outstanding:

- Install a Point of Sale (POS) system to record sundry sales - Seekom is adding POS to their software later this year;
- Transition to a cashless regime for safety reasons – already 90% of income comes from non-cash sources and cashless regime to be complete by Labour Weekend or sooner;
- Implement regular reconciliations of bookings/payments – to be regularly scheduled by Finance team.

A requirement of this aim is to develop and manage that campground to achieve improved revenue. Below is a graph of campground revenue and costs as at end of June 2017. The campground made a surplus in the 2016/2017 year. Further operational savings are planned in the 2017/2018 from savings of \$8,500 hireage from the purchase of the overnight manager's cabin and staffing changes to reduce overtime payments.



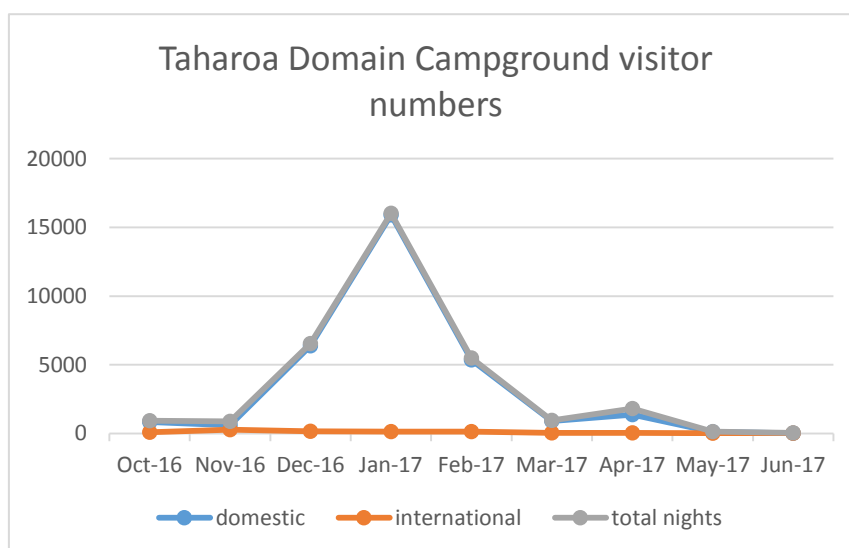
The bulk of the funding was received over the January/February period.

The RMP states the occupancy of the campgrounds should not exceed 500 campers spread over the two separate camp areas (400 Pine Beach and 100 Promenade Point). In the past only paying campers (adults and children over eight years) were counted.

The transition to the online booking system requires all paying campers to be recorded, including under eight's who now pay, and for this reason the online booking capacity has been increased by 20% to achieve the previous occupancy. This will not be exceeded without the Committee's consent.

Consent is sought to exceed the Promenade Point campground capacity for the night of Thursday 23 November 2017 to accommodate Kings College who plan to have 123 boys and 30 adults camping. This is an annual visit and the toilets can cope with this overnight demand.

Campground bookings have opened for 2017/2018 and there has been high interest.



## 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 Community Manager's responsibility to ensure all operations are conducted within budget. The financial budgets are set within the Long Term Plan and respective Annual Plan. 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 Reserve Management Plan.

**File number:** 4702.24.08 **Approved for agenda**   
**Report to:** Taharoa Domain Governance Committee  
**Meeting date:** **10 August 2017**  
**Subject:** **Northland Regional Council Kai Iwi Lakes Operations Report**  
**Date of report:** 31 July 2017  
**From:** Sue Hodge, Parks and Community Manager  
**Report purpose**  **Decision**  **Information**  
**Assessment of significance**  **Significant**  **Non-significant**

**Summary**

**Attachment 1** is the Northland Regional Council Kai Iwi Lakes Operations report from Biosecurity Projects Manager, Kane McElrea for the information of the Committee.

**Recommendation**

*That the Taharoa Domain Governance Committee receives the Parks and Community Manager's report 'Northland Regional Council Kai Iwi Lakes Operations Report' dated 31 July 2017' 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) Reserve Management Plan.

**Reason for the report**

To ensure the Committee is informed about the work being undertaken by Northland Regional Council (NRC) in respect to Kai Iwi Lakes (Taharoa Domain).

**Background**

The Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP) includes a number of actions particularly under the Environment and aim that are delivered by the regional council.

The NRC's operations report is **Attachment 1**.

**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 is consistent with the RMP.

**Financial implications**

NRC is responsible for funding the activities outlined in their report. The financial budgets are set within the Long Term Plan and respective Annual Plan.

***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.

**Attachment**

1. [NRC memo](#)

Date: 27/17/2017.

To: Taharoa Domain Governance Committee

From: Northland Regional Council,  
Kane McElrea, Biosecurity Projects Manager.

Subject: Northland Regional Council update to Taharoa Domain Governance Committee.

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## **Reason for report**

To provide an update to the Taharoa Domain Governance Committee on actions carried out by the Northland Regional Council (NRC) at the Taharoa Domain and surrounding catchment in relation to pest and weed management, land management and environmental monitoring.

## **Background**

Since December 2013, the NRC biosecurity staff have continued to support and manage pest management activities within the Taharoa Domain and surrounding adjacent private land. NRC land management staff are continuing to work with landowners in the catchment to improve lake and river water quality with farm water quality plans and wetland fencing. NRC Hydrology and Environmental monitoring staff carry out regular lake and ground water monitoring to better understand groundwater movements and lake water quality.

The following sections provide a brief update from each NRC department which is undertaking work relating to the Kai Iwi Lakes and surrounding catchment over the past six months.

## **Maritime**

Submissions for the new Navigation Safety Bylaws are still being received and are due to close August 2<sup>nd</sup>, 2017. For more information, visit the NRC [website](#). The [Navigation Safety Bylaw 2012](#) is currently in place by default.

## **Biosecurity**

The NRC's Biosecurity department has continued to assist with pest and weed control activities at the Taharoa Domain since December 2013. Control of invasive species such as wilding pines, acacia, possums, rodents, pest fish and feral pigs has been ongoing using specialist staff and local contractors.

Local contractors have been working alongside KDC staff to control large areas of acacia around Lake Kai Iwi and above the shag nesting swamp. Ongoing control of wilding pines and acacia is being carried out, with contractors working to undertake some maintenance work through areas previously controlled several years ago.

Staff are planning to carry out another annual possum and rodent control operation during August and September 2017. Using baitstations, contractors will deploy ratabate for the control of rats followed by Feratox for the control of possums.

Contractors have maintained a predator trapping network to control stoats, weasels, ferrets and feral cats at the Taharoa Domain and surrounding area. This network is checked and maintained monthly to reduce

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the impact of these predators on wildlife such as native waterfowl and nesting shore birds. 2016 / 2017 trapping results are shown in table below:

Jan 2016 – Dec 2016 trapping results:

	Stoat	Ferret	Weasel	Rat	Feral Cat	Hedgehog
2016	17	6	4	78	10	26
2017	1	0	3	42	6	1

### Biosecurity Advocacy - Check Clean Dry

Check, Clean, Dry (CCD) is a freshwater advocacy programme used to help educate and inform people about the risks of freshwater pests and how to reduce the risk of spreading these pests. Most of the programme advocacy is carried out during the summer season when the lakes receive a high volume of visitors. During the 2016-2017 season, 338 people were surveyed regarding freshwater pests and preventive action, from which an annual report was produced, see attached or be downloaded [here](#). There was an overall positive response from boat owners and other lake users with majority surveyed acknowledging the need to protect the lakes from introduce pest species.

In late June, advocates also attended the Kai Iwi Lakes Annual Trout Fishing Competition, held by Northland Fish & Game. The event saw upwards of fifty people attend the prize-giving, at which a CCD advocates took the opportunity to speak about freshwater pests. Fish & Game Northland were supportive to the advocates and welcomed their attendance, which was well-received by event attendees. All attendees received a pack containing information and collateral. CCD boat propeller flags and drink bottles were also provided to include in prize packs.



### Biodiversity

The Kai Iwi lakes Annual Weed Surveillance was completed in June, which was undertaken using a mix of commercial dive biosecurity operators and NRC snorkel team. Entry points and risk sites in all three lakes were checked looking for new incursions of hornwort and three oxygen weed species. No new incursions or weeds of concern were recorded. An introduced left handed pond snail was seen in Kai Iwi, which may be a new record, however these are common in many lakes and probably are not an issue. Adult dune lake galaxiids were seen at depth in Lake Waikare and there were also plenty of young common bullies in the three lakes. Gambusia were rare in the Lake Waikare margins but common in the Lake Kai Iwi margins. Lisa Forester also noted that the lakes were looking fuller than observed in a long time, and that visibility is good in all three lakes. Lake Kai Iwi in particular is in fantastic condition.



The Lake Waikare Reed Belt Monitoring Project to monitor changes post power boat close off is underway. Transects were established and measured around the margin of the lake in mid-June at ten randomly located site plus two supplementary sites. Parameters measured included:

- physical description of the site
- minimum and maximum depth
- height
- vegetation cover scores
- dieback and fertility for each plant species as well

In addition, where material was available, plant samples were collected which were sent away for nutrient analysis of nitrogen, phosphorus potassium, calcium and magnesium levels. Information from transects and nutrient analysis will be a baseline for future comparisons. It is hoped that the nutrient analysis will indicate differences in nutrient input around the lake, which may turn out to be a useful method for tracking nutrient hotspots in other lakes. Results are expected in coming weeks.

### **NRC State of Environment monitoring**

Routine lake water quality monitoring was carried out in early May. Nitrogen concentrations have continued to remain at low levels in Lake Taharoa, Lake Waikare and Lake Kai-iwi. Lakes monitoring is scheduled for the second week of August if favourable weather allows.

**File number:** 4702.24.02.02 **Approved for agenda**   
**Report to:** Taharoa Domain Governance Committee  
**Meeting date:** **10 August 2017**  
**Subject:** **Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022**  
**Date of report:** 28 July 2017  
**From:** Sue Hodge, Parks and Community Manager  
**Report purpose**  **Decision**  **Information**  
**Assessment of significance**  **Significant**  **Non-significant**

The Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP) includes under Aim 5: Economic Development the direction to develop a promotional strategy to reinforce Kai Iwi lakes reputation as a destination sitting alongside allied attractions like Waipoua Forest the Kauri Coast experience.

In June the Committee resolved to adopt the Promotion Work Plan 2017/2022 and to hold a briefing so that they can have input into implementing the plan.

One of the first actions of the Promotion Work Plan was to determine who our customers were and what our unique selling point (USP) could be, how we promote ourselves and what we promoted. To assist, a Marketing strategy has been commissioned.

The strategy suggests our target audience is Domestic visitors (regular/repeat, Auckland and Northlanders escaping busy East Coast) and International (campervans and already in Northland) and Groups and Events. These groups should form the main focus of marketing activities to grow visitor numbers and nights; ideally outside the peak season.

The report suggests that to build visitation outside the peak summer period will need more reasons for off-peak visitors to stay or stay longer e.g. by offering new 'trails of discovery' of the Domain or events. Also, nature-based positioning alone will not be able to compete with other nature-based attractions in Northland. So a more aspirational positioning around 'real discovery' that combines local stories / legend with trails of discovery by land and lake offers a new and richer way to present Kai Iwi Lakes. This concept is consistent with the RMP's objective of providing a cultural "story".

The following Marketing Objectives are recommended:

1. **Create new or added destination appeal** by creating new experiences that infuse authentic stories and hidden gems as 'wow factors' with short walks, rides and boat, kayak or paddleboard journeys i.e. on land and on water that visitors can enjoy or 'tick off'.
2. Continue to position Kai Iwi Lakes as the place **where nature is easy to enjoy**. An easy escape from busy Auckland and the East Coast of Northland to reconnect with nature and loved ones plus enjoy the recreational options available.
3. **Generate new interest in visiting Kai Iwi Lakes** by upgrading marketing assets e.g. developing bold new photography, perhaps using night sky to get around the lack of forest and beach views. Also investigate hosting more event weeks or weekends as the main driver outside the peak season e.g. a starlight photography week.

4. **Grow the base of regular travellers** coming outside the peak season by offering something new each year particularly new glamping or camping options, new boat, bike, kayak or board hire (or try something new options) and possible cycle trail connections.
5. **Encourage visitors to participate in managing their own impacts** and contributing to planting or cleanup activities.

The Promotion Work Plan 2017/2022 has been updated to reflect this new positioning, what we are promoting and how we will go about this.

The measures for success will be increased events, increased participation in events, increased revenue outside of the peak camping season, increased online presence. This can be reported annually to the Committee.

### **Recommended**

*That the Taharoa Domain Governance Committee receives the Park and Community Manager's report 'Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022' dated 28 July 2017 and the information contained therein.*

### **Reason for the report**

To provide an opportunity for the Committee to have input into the Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022.

### **Background**

The Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP) includes under Aim 5: Economic Development the direction to develop a promotional strategy to reinforce Kai Iwi lakes reputation as a destination sitting alongside allied attractions like Waipoua Forest the Kauri Coast experience.

In June 2017 the Committee resolved:

1. *Adopts the draft Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022; and*
2. *A briefing will occur with the Taharoa Domain Governance Committee so that their input can be included in the Kai Iwi lakes (Taharoa Domain) Promotion Work Plan 2017/2022 and Infrastructure Plan.*

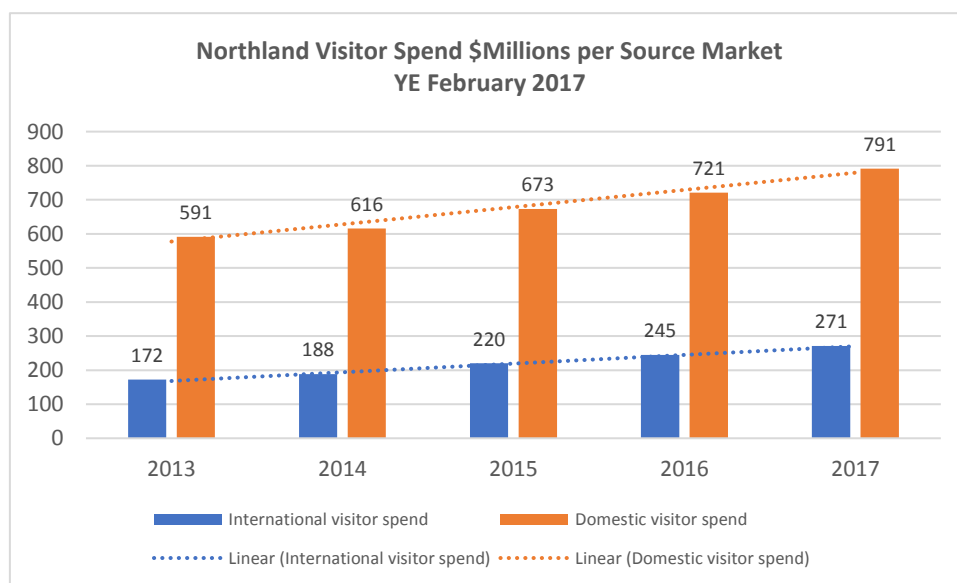
### **Issues**

One of the first actions of the Promotion Work Plan was to determine who our customers were and what our unique selling point (USP) could be. This would influence how we promote ourselves and what we promoted.

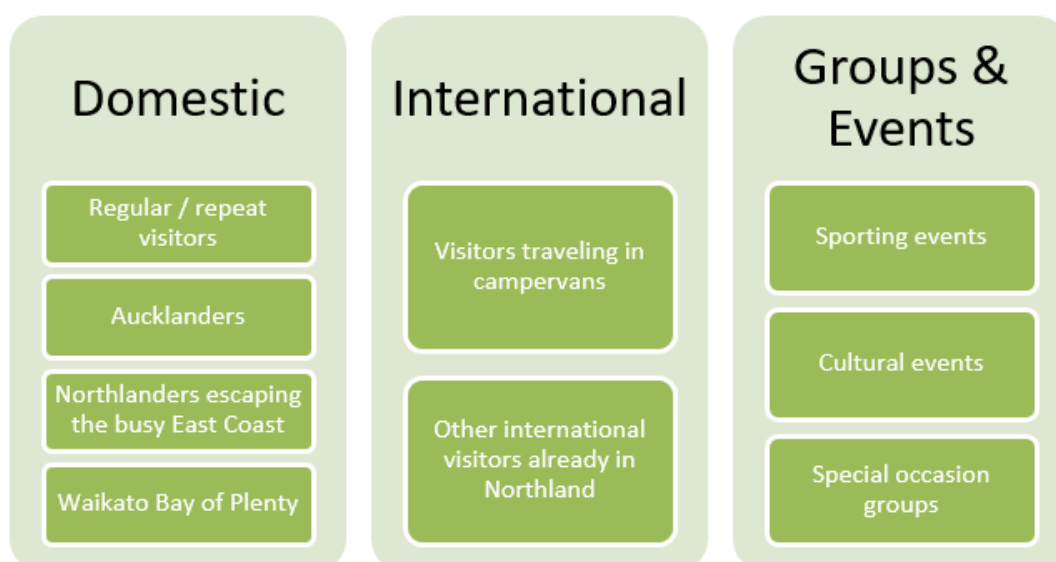
To determine the USP, Quality Tourism was commissioned to develop Marketing Strategy 2017-2021 (**Attachment 1**). This report has been used to update the Promotion Work Plan (**Attachment 2**) and Action Plan.

### Proposed Target Audience

The graph below shows the Northland visitor spend over the last five years steadily growing. The mix is 75% Domestic visitors and 25% International visitors. When this is broken down to the Kaipara District Council area the split is 86% Domestic visitors and 14% International visitors. The lower International visitor spend in Kaipara district is consistent with the low number of International visitor nights recorded at Kai Iwi Lakes Campgrounds.



Based on the existing origin of visitors to both the Kaipara district and to Kai Iwi Lakes and allowing for the opportunity to attract more international visitors, the following target audiences should form the main focus of marketing activities to grow visitor numbers and nights; ideally outside the peak season.



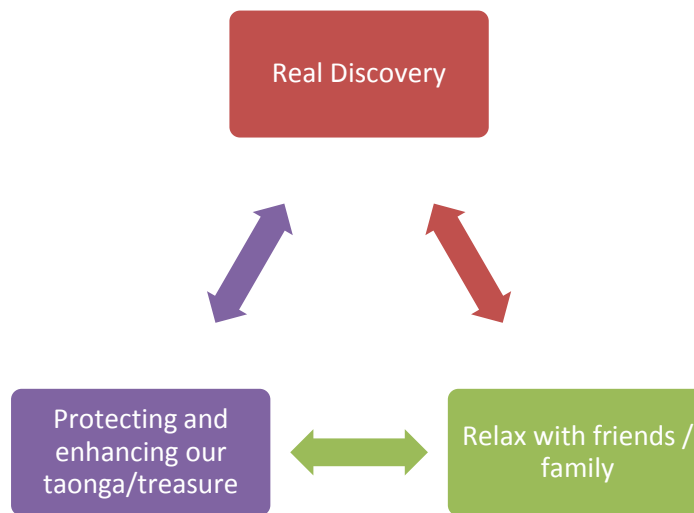
### Destination Positioning

The current offering for visitors appears to be based on “relaxed recreation” where friends and family spend time in summer enjoying the fun to be had at, and around, the Lakes. Events also offer a social as well as nature / recreational experience. These social elements of the holiday experience are not as readily available outside the summer peak when domestic visitors are back at work / school.

Building visitation outside the peak summer period will depend on the destination appeal or reasons for people to spend time at the Kai Iwi Lakes when there are fewer social reasons to stay. Potential exists to provide off-peak visitors with many more reasons to stay or stay longer e.g. by offering new 'trails of discovery' of the Domain or events.

A nature-based positioning alone may not be able to compete with other nature-based attractions in Northland. So a more aspirational positioning around 'real discovery' that combines local stories / legend with trails of discovery by land and lake offers a new and richer way to present Kai Iwi Lakes.

### Proposed positioning for Kai Iwi Lakes / Taharoa Domain

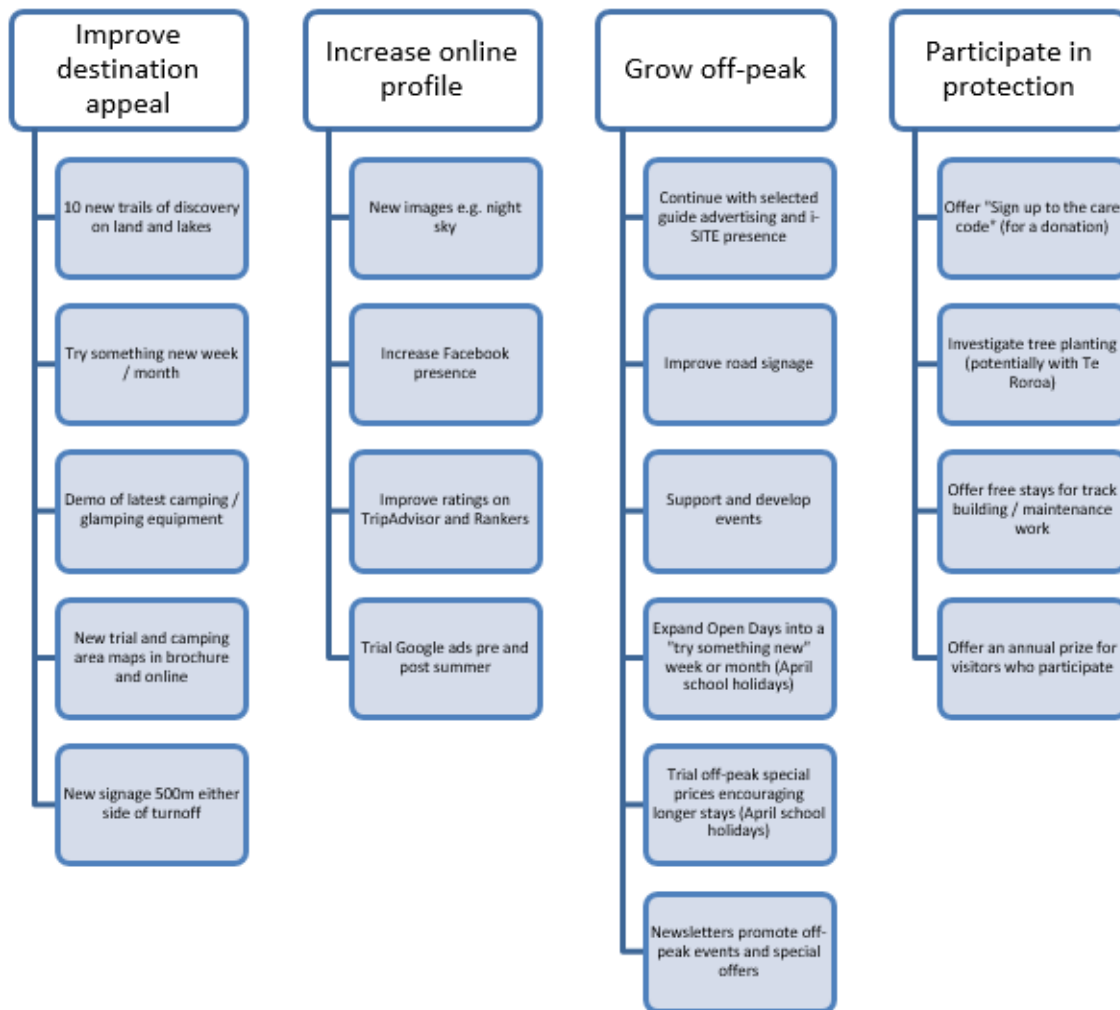


### Proposed Marketing Objectives

1. **Create new or added destination appeal** by creating new experiences that infuse authentic stories and hidden gems as 'wow factors' with short walks, rides and boat, kayak or paddleboard journeys i.e. on land and on water. This might appear that there are as many tracks or routes to explore as a mountain bike park with individually named land and lake routes that visitors can enjoy or 'tick off'.
2. Continue to position Kai Iwi Lakes as the place **where nature is easy to enjoy**. An easy escape from busy Auckland and the East Coast of Northland to reconnect with nature and loved ones plus enjoy the recreational options available. Potential exists to develop a stronger proposition by providing visitors with more to enjoy or discover.
3. **Generate new interest in visiting Kai Iwi Lakes** by upgrading marketing assets e.g. developing bold new photography, perhaps using night sky to get around the lack of forest and beach views. Also investigate hosting more event weeks or weekends as the main driver outside the peak season e.g. a starlight photography week or paddleboarding week.
4. **Grow the base of regular travelers** coming outside the peak season by offering something new each year particularly new glamping or camping options, new boat, bike, kayak or board hire (or try something new options) and possible cycle trail connections.
5. **Encourage visitors to participate in managing their own impacts** and contributing to planting or cleanup activities.

## Marketing Strategies to Achieve Objectives

Below, under four pillars, are the strategies or activities suggested to deliver the Promotion Work Plan.



The measures for success will be increased events, increased participation in events, increased revenue outside of the peak camping season, increased online presence. This can be reported annually to the Committee.

### 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.

#### *Financial implications*

Nil. This strategy is reallocating existing budgets and there are no financial implications.

**Legal/delegation implications**

There are no delegation issues; the Committee has delegated authority from Council to govern the Kai Iwi lakes (Taharoa Domain) in terms of the RMP.

**Options**

The Committee has the following options:

**Option A** Approve the updated Promotion Work Plan 2017/2022.

**Option B** Decline to approve the updated Promotion Work Plan 2017/2022.

**Option C** Approve a modified version of the updated Promotion Work Plan 2017/2022.

**Assessment of options**

Option A. Approving the updated Promotion Work Plan will achieve a more focused approach to the promotion of Kai Iwi Lakes and is consistent with RMP.

Option B. Decline to approve the updated Promotion Work Plan will mean promotion outside of the peak period will be unfocused and may not increase revenue or events.

Option C. Approving a modified version of the updated Promotion Work Plan may achieve a more focused approach to the promotion of Kai Iwi Lakes and is consistent with RMP.

**Assessment of significance**

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

**Recommended option**

The recommended option is Option A or C.

**Next step**

Continue to implement the Promotion Work Plan.

**Attachment 1** [Marketing Strategy 2017-2021](#)

**Attachment 2** [Updated Promotion Work Plan](#)

# **Kai Iwi Lakes (Taharoa Domain)**

## **Marketing Strategy 2017 - 2021**

**Including Review of SWOT Analysis and Promotion Work Plan 2017**

Final Version

July 2017





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## 1.0 Introduction

This document has been prepared for the Kaipara District Council in response to a request to review the current draft SWOT Analysis and Promotion Work Plan for Kai Iwi Lakes (Taharoa Domain) plus add target audience information and a potential unique selling proposition, or USP, for Kai Iwi Lakes / Taharoa Domain as a visitor destination.

## 2.0 Strategic Imperatives: Assessment of Key Issues and Opportunities

The key issues and opportunities below have been prepared after visiting the Taharoa Domain and reviewing the SWOT Analysis, Promotion Work Plan 2017 for Kai Iwi Lakes:

1. **Create new or added destination appeal** by creating new experiences that infuse authentic stories and hidden gems as ‘wow factors’ with short walks, rides and boat, kayak or paddleboard journeys i.e. on land and on water. This might appear that there are as many tracks or routes to explore as a mountain bike park with individually named land and lake routes that visitors can enjoy or ‘tick off’.
2. Continue to position Kai Iwi Lakes as the place **where nature is easy to enjoy**. An easy escape from busy Auckland and the East Coast of Northland to reconnect with nature and loved ones plus enjoy the recreational options available. Potential exists to develop a stronger proposition by providing visitors with more to enjoy or discover. Taking more of a lead in promoting Kai Iwi Lakes as a destination instead of promoting the camping options should also help in growing awareness and interest.
3. **Generate new interest in visiting Kai Iwi Lakes** by upgrading marketing assets e.g. developing bold new photography perhaps using night sky to get around the lack of forest and beach views. Also investigate hosting more event weeks or weekends as the main driver outside the peak season e.g. a starlight photography week or paddle boarding week.
4. **Grow the base of regular travelers** coming outside the peak season by offering something new each year particularly new glamping or camping options, new boat, bike, kayak or board hire (or try something new options) and possible cycle trail connections.
5. **Encourage visitors to participate in managing their own impacts** and contributing to planting or cleanup activities.

### 3.0 Visitors to Northland

#### Guest Night Performance: Commercial Accommodation Monitor (CAM)

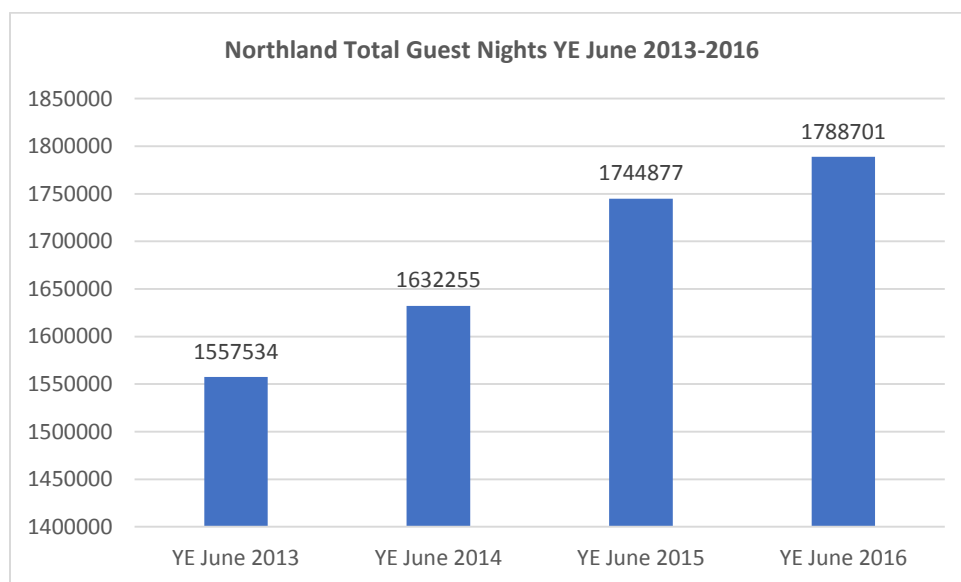
When reviewing the last four years' performance (as at year-end June), Northland has experienced steady growth from international and domestic visitors.

**Table 1.0 Northland 4-Year CAM Performance**

Year	Total Guest Nights	Inc-Dec	International GN	Inc-Dec	Domestic GN	Inc-Dec
YE June 2013	1,557,534	4.1%	554,837	3.7%	1,002,697	4.3%
YE June 2014	1,632,255	4.8%	571,903	3.1%	1,060,352	5.7%
YE June 2015	1,744,877	6.8%	606,415	6.0%	1,138,463	7.3%
YE June 2016	1,788,701	2.3%	637,420	5.5%	1,151,281	0.6%

Source: Statistics NZ, Commercial Accommodation Monitor (CAM) Year-end June 2013, 2014, 2015, 2016

**Graph 1.0: Northland Total Guest Night Performance YE June 2013-2016**



#### Commercial Accommodation Monitor Results

For the **year-ended February 2017** compared with the previous year:

- Guest nights rose 9.2 percent to 1,905,984
- International guest nights rose 8.5 percent to 669,325 (35%)
- Domestic guest nights rose 9.6 percent to 1,236,659 (65%)

- The average length of stay fell slightly from 2.20 nights to 2.19 nights
- Northland's performance exceeds the national annual average growth in guest nights of 5% in 2017 and 5% in 2016.

Northland attracts the 6<sup>th</sup> highest number of visitors and receives 65% of visitors from domestic markets and 35% from international markets. Table 2.0 shows Year-end February 2017 Northland (9.2%) and Bay of Plenty (9.3%) have had the highest growth increase in Total Guest Nights and Northland is currently experiencing the highest domestic growth (9.6%).

**Table 2.0 Top 10 Visitor Regions in New Zealand**

TOP 10 Visitor Destinations in New Zealand							Feb-17	Feb-16
YE February 2017	Total Guest Nights	Inc-Dec	International GN	Inc-Dec	Domestic GN	Inc-Dec	Length Stay	Length Stay
Auckland	7,448,711	3.4%	3,335,760	7.9%	4,112,950	-0.1%	2.03	2.03
Queenstown	3,516,423	6.6%	2,452,023	10.2%	1,064,400	-1.0%	2.50	2.55
Canterbury	3,441,641	-2.9%	1,629,441	3.1%	1,812,200	-7.7%	1.93	1.98
Wellington	2,656,392	0.5%	893,148	6.3%	1,763,244	-2.2%	2.15	2.13
Rotorua	2,182,994	6.4%	1,112,890	13.2%	1,070,104	0.2%	1.83	1.80
Northland	1,905,984	9.2%	669,325	8.5%	1,236,659	9.6%	2.19	2.20
Nelson Tasman	1,459,036	7.1%	547,093	10.7%	911,943	5.1%	2.39	2.33
Waikato	1,392,376	5.6%	363,889	7.6%	1,028,486	4.9%	1.82	1.81
West Coast	1,374,424	5.5%	882,739	13.0%	491,685	-5.8%	1.40	1.40
Bay of Plenty	1,206,890	9.3%	308,340	17.7%	898,550	6.6%	2.58	2.60

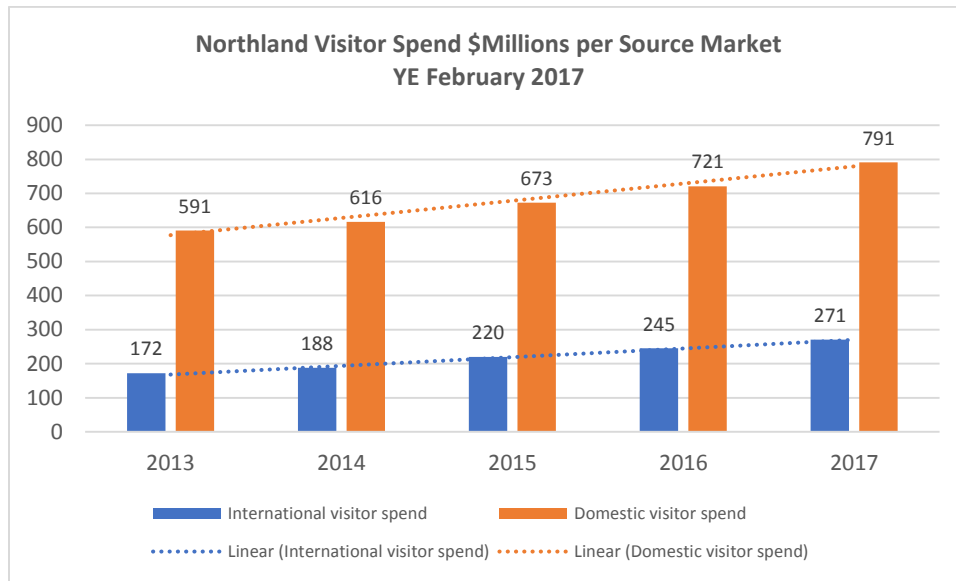
Source: Statistics NZ, Commercial Accommodation Monitor (CAM) Year-end February 2017

### Visitor Spend Performance (YE February 2017)

The region has also seen steady growth in visitor spend (\$millions) since 2013 with domestic visitors generating 75% of total spend and international visitors generating 25% of total spend.

- Total visitor spend                      \$1,062m
- Domestic spend                            \$ 791m (75%)
- International spend                        \$ 271m (25%)

**Graph 2.0 Northland Visitor Spend \$Millions per Source Market**



Source: Ministry of Business, Innovation & Employment, Monthly Regional Tourism Estimates YE Feb 2017

Visitor spend on a district basis shows the Far North District receives 46.7% market share of total visitor spend, closely followed by Whangarei District with 42.7% market share.

However, when we break down visitor spend into international and domestic spend per district, the Far North District receives 62% of total international spend, Whangarei District receives 32.5% international benefit and Kaipara District receives 5.5% international benefit.

From a domestic benefit perspective, Whangarei District receives 46.1% of the benefit, Far North District receives 41.5% benefit and Kaipara District 12.5% benefit.

**Table 3.0: Visitor Spend per District in Northland Region**

District/Region	International VS \$m	Domestic VS \$m	Total Visitor Spend	Mkt Share
Whangarei District	88	365	453	42.7%
Far North District	168	328	496	46.7%
<b>Kaipara District</b>	<b>15</b>	<b>98</b>	<b>113</b>	<b>10.6%</b>
Northland Total	271	791	1062	100%

Source: Ministry of Business, Innovation & Employment, Monthly Regional Tourism Estimates YE Feb 2017

## 4.0 Domestic Segmentation Research (DGIT.nz)

The DGIT.nz domestic segmentation research shows that for potential long stay visitors to Northland (i.e. 5 days or more), who are easily able to travel here and who want to stay at a holiday park or DOC camp group will attract visitors from the Upper North Island and also Wellington. Characteristics of these domestic visitors are:

- There are 120,000 potential trips to Northland by these visitors each year
- 91% travel by road and only 9% by air
- 45% are aged between 35 and 49 years of age
- Household composition of these visitors is a mix of couples with no children (27%) and couples with pre-school or school age kids (29%)
- These visitors want a wide variety of activities with beaches by far the most popular (43%) followed by hiking (27%)
- These visitors appear price sensitive as 43% will respond favourably to a deal or special offer and the main barrier to travel (32% of visitors in this segment) is the cost of accommodation.

Communications channels relevant to domestic visitors who are easily able to travel here and who want to stay at a holiday park or DOC for 5 days or more include:

- Before planning their visit: Facebook (54%), outdoor e.g. billboard (34%) and free to air TV (27%)
- When planning a trip: Google (76%), TripAdvisor (34%) and regional tourism websites (34%).

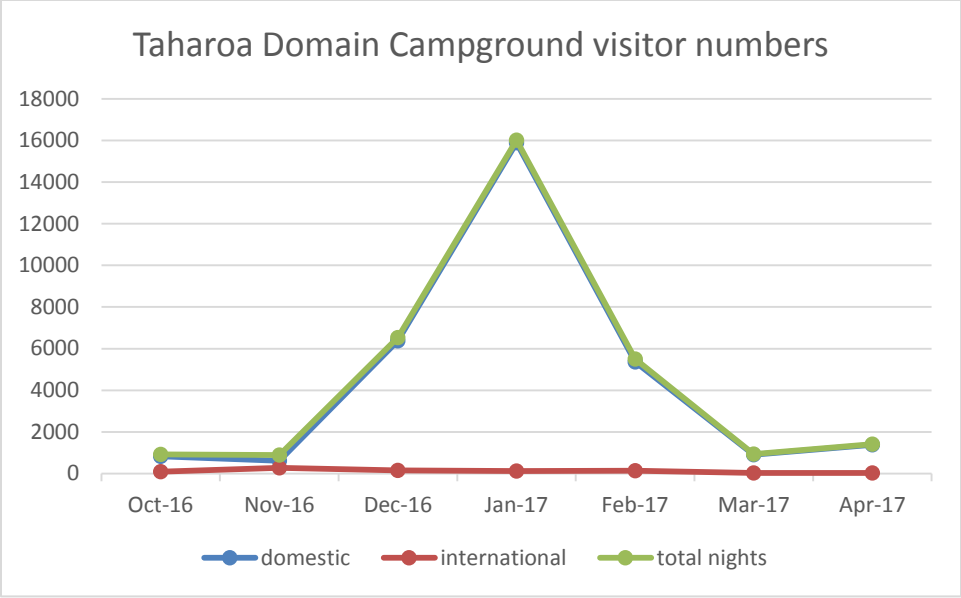
## 5.0 Current Visitors to Kai Iwi Lakes / Taharoa Domain

Domestic visitors make up over 97% of total visitor nights and 87% of visitor nights occur during the summer months of December, January and February.

**Table 4.0: Kai Iwi Lakes Holiday Park Visitor Nights**

	Domestic	International	Total
Apr-17	1376	33	1409
Mar-17	904	35	939
Feb-17	5363	137	5500
Jan-17	15899	123	16022
Dec-16	6382	149	6531
Nov-16	609	279	888
Oct-16	828	93	921
	<b>31361</b>	<b>849</b>	<b>32210</b>
	97.4%	2.6%	

Source: Kai Iwi Lakes Summer Survey, 2014



Source: Kai Iwi Lakes Summer Survey, 2014

The Kai Iwi Lakes Summer Survey from 2014 provides useful information on the regions of origin of the domestic visitors. Essentially all visitors answering the survey were from the Upper North Island.

**Table 5.0: Kai Iwi Lakes Origin of Visitors**

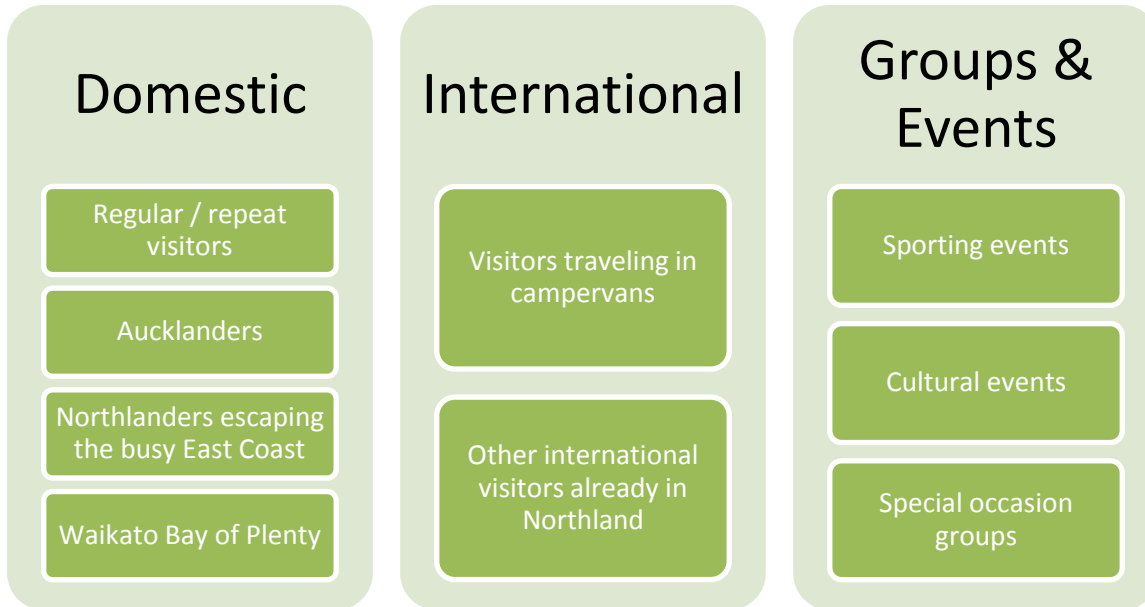
	Percentage
Kaipara District	5.09%
Other Northland	13.77%
Auckland	61.43%
Upper North Island	19.55%
International	0.13%

Source: Kai Iwi Lakes Summer Survey, 2014

Based on this existing origin of visitors to both the Kaipara District and to Kai Iwi Lakes and allowing for the opportunity to attract more international visitors, the following target audiences should form the main focus of marketing activities to grow visitor numbers and nights – ideally outside the peak season.

## 6.0 Proposed Target Audiences

Table 6.0 Proposed Target Audiences



## 7.0 Channels of Communication

There are a number of channels to be used to communicate with the above audiences however three overarching channels will work for most:

1. Digital / online channels:
  - a. An effective website that is also mobile responsive – ideally promoting Kai Iwi Lakes as a destination as well as the camping grounds i.e. places to stay and things to do
  - b. [www.facebook.com](http://www.facebook.com)
  - c. [www.tripadvisor.com](http://www.tripadvisor.com)
  - d. Databases (and newsletters) of regular visitors and groups / events.
2. Signage:
  - a. Maintain sign at the corner of SH12 and also 500 metres either side of the turnoff.
3. Travel Guides / Maps:
  - a. Northland Visitor Guide
  - b. Ancient Kauri Trail Map
  - c. AA Guide to Northland.



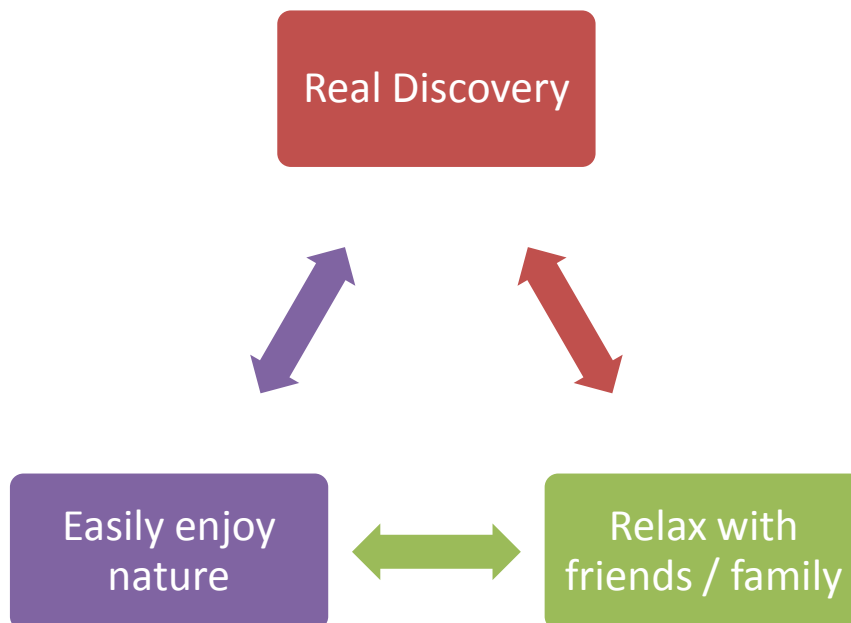
## 8.0 Destination Positioning of Kai Iwi Lakes / Taharoa Domain

The current offering for visitors appears to be based on “relaxed recreation” where friends and family spend time in summer enjoying the fun to be had at, and around, the lakes as well as each other’s company. Events also offer a social as well as nature / recreational experience. These social elements of the holiday experience are not as readily available outside the summer peak or events when domestic visitors are back at work / school.

Building visitation outside the peak summer period and events weekends will depend on the destination appeal or reasons for people to spend time at the Kai Iwi Lakes when there are fewer social reasons to stay. Potential exists to provide off-peak visitors with many more reasons to stay or stay longer e.g. by offering new ‘trails of discovery’ of the domain, events or instruction courses. Other reasons for visiting off-peak would require capital investment such as building or offering glamping options in the warmer autumn months or staying under the stars in a high tech Pure Pod ([www.purepods.com](http://www.purepods.com)).

A nature-based positioning alone may not be able to compete with other nature based attractions in Northland such as the many beaches and iconic native forests. So a more aspirational positioning around ‘real discovery’ that combines local stories / legend with trails of discovery by land and lake offers a new and richer way to present Kai Iwi Lakes / Taharoa Domain. Discovering new ways to enjoy the lakes e.g. hiring the latest kayak or paddle board during a ‘demo week’ also fits within this positioning. It may also be advantageous to phase the rollout of new trails of discovery so that there are new reasons to visit offered over two or three years. A small reference group could be formed to identify trails / routes and themes plus names – this might comprise regular campers, the manager plus Te Roroa.

**Figure 1.0 Proposed Positioning for Kai Iwi Lakes / Taharoa Domain**



## 9.0 Proposed Marketing Objectives

1. **Improve the destination appeal (remarkability) of Kai Iwi Lakes by offering 10 new reasons for visitors to stay, and stay longer, outside the peak season – ideally by summer 2017 / 2018.** 10 new ‘trails of discovery’ that combine local stories or legend with walking and biking routes on land and on boating or paddling routes on water i.e. around / across the lakes could generate significant new interest as well as provide visitors with a reason to stay and explore more. Examples of new trails of discovery:

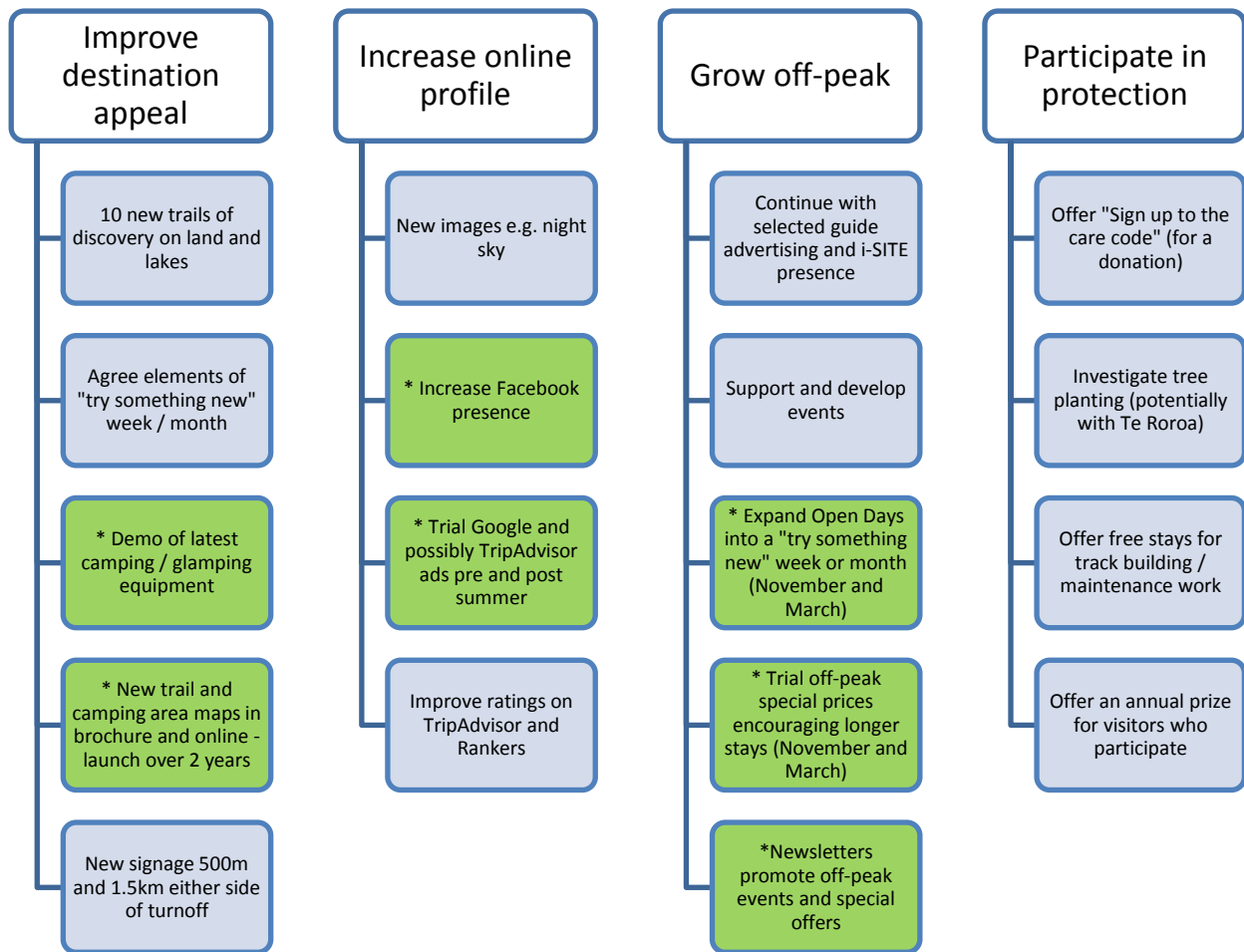
On Land	On Water
<ul style="list-style-type: none"> <li>• Round lake hikes (already in place but need better names and supporting narrative and if budget exists new interpretation and directional signage)</li> <li>• Lookout point track</li> <li>• Hilltop hikes</li> <li>• Secret picnic sites and walks</li> <li>• Cross country cycle trail</li> </ul>	<ul style="list-style-type: none"> <li>• Swimmers loop</li> <li>• Taharoa Traverse (e.g. around the safest edge)</li> <li>• Paddle board triangle</li> <li>• Kayakers slalom</li> <li>• Sailors cutting or multi-leg route</li> <li>• Walk on water photo op</li> </ul>

2. **Increase our profile by consistently promoting Kai Iwi Lakes in cost effective channels to appeal to our primary markets** of domestic visitors in the Upper North Island and also to international visitors already in Northland. Greater use of digital marketing is recommended and new imagery such as night sky / sunset photos to improve destination appeal. It is timely to review the name and URL used for <http://kaiiwicamp.nz/> as trails of discovery will need a “things to do” section on the website which in turn suggests the website name could broaden beyond promoting the camp to promoting the destination. A new ‘hero image’ would also help promote a consistent message in both print and online marketing.
3. **Grow visitation outside the peak season by offering more reasons for people to visit,** and to stay longer, plus test price-based offers that incentivise longer stays e.g. buy two get one night free. Also contact groups and event organisers who might want to run a new event or extend an existing event into a “try it out” weekend or even week encouraging people to test new camping or boating equipment or technology.
4. **Encourage visitors to participate in protecting the domain and contributing to environmental restoration projects while staying.** Explore native tree planting options (perhaps working alongside Te Roroa) and also seek to create fun ways for visitors to contribute e.g. by removing litter, weeds or by signing up to the care code in order to go into a seasonal prize draw etc.

## 10.0 Marketing Strategies to Achieve Objectives

This table of marketing strategies includes the activities detailed in the current Promotion Work Plan split across the middle two columns. The current promotional budget of just under \$10,000 is very focused on traditional guide advertising. Some savings e.g. \$2,000 could be made in guide advertising (e.g. smaller ads) and allocated to online marketing activity and new photography e.g. running a competition.

It is also possible to create cost-effective off-peak campaigns (ideally in spring and autumn) by combining activities highlighted below (by an asterisk and green shading) in order to generate a spike of activity and greater impact in the market. Testing, reviewing and improving off-peak campaigns is also possible with each spring campaign essentially being a practice run for the autumn campaign.



## 11.0 Comments on and Additions to SWOT Analysis

Additional material has been added in **green** font. Key issues and opportunities are in **bold** font

### Kai Iwi Lakes – What makes this area unique & different to visitors?

- Real discovery (of our place and stories)
- Economic development as the key driver for this. Enhancing economic development for Kaipara as a whole – including Taharoa Domain and campground.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• <b>People have strong ties to the Lakes</b>, with large camping groups returning to the area on an annual basis</li> <li>• Kai Iwi is a positive, easy to say and friendly name that offers a clear translation</li> <li>• Unique on a regional and national level (water quality, white sands and native bush)</li> <li>• <b>Important cultural history and heritage: archaeological sites</b> (Maori settlement and gum digging)</li> <li>• Strong natural character - the Domain is not over developed</li> <li>• <b>Lakes have high water quality characteristics and look crystal clear</b></li> <li>• Lakes support an extensive community of native plants that are becoming increasingly rare in NZ</li> <li>• Habitat for a range of species including rare and vulnerable plant and animal species (NZ's rarest native fish – Dwarf Inanga and Dune Lake Galaxias)</li> <li>• Wetlands and forest remnants</li> <li>• Walking &amp; cycling tracks</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Primary marketing channels such as the brochure and website do not make booking easy</b> e.g. contact phone and email details are hidden in the brochure and the website is not ranking well in google searches nor is it mobile friendly / enabled</li> <li>• Wilding pines and weed species invading surrounding shrub lands means <b>the environment is not as pristine or as good an example of a natural environment</b></li> <li>• Shade trees/planting not adequate</li> <li>• Vulnerable environment – effects on water quality, flora and fauna from mismanaged activities and lack of monitoring</li> <li>• Basic infrastructure facilities, insufficient to meet peak season demands e.g. toilets</li> <li>• No cabin facilities meaning the campground is unlikely to attract winter usage aside from campervans</li> <li>• <b>Walking tracks are not well signposted and do not make the most of viewpoints or lookouts.</b></li> <li>• <b>Little to no use of Domain and campgrounds during off peak seasons</b></li> <li>• Campgrounds feel isolated and lack security in low seasons due to low use</li> <li>• Location is isolated and far from main service town</li> </ul>

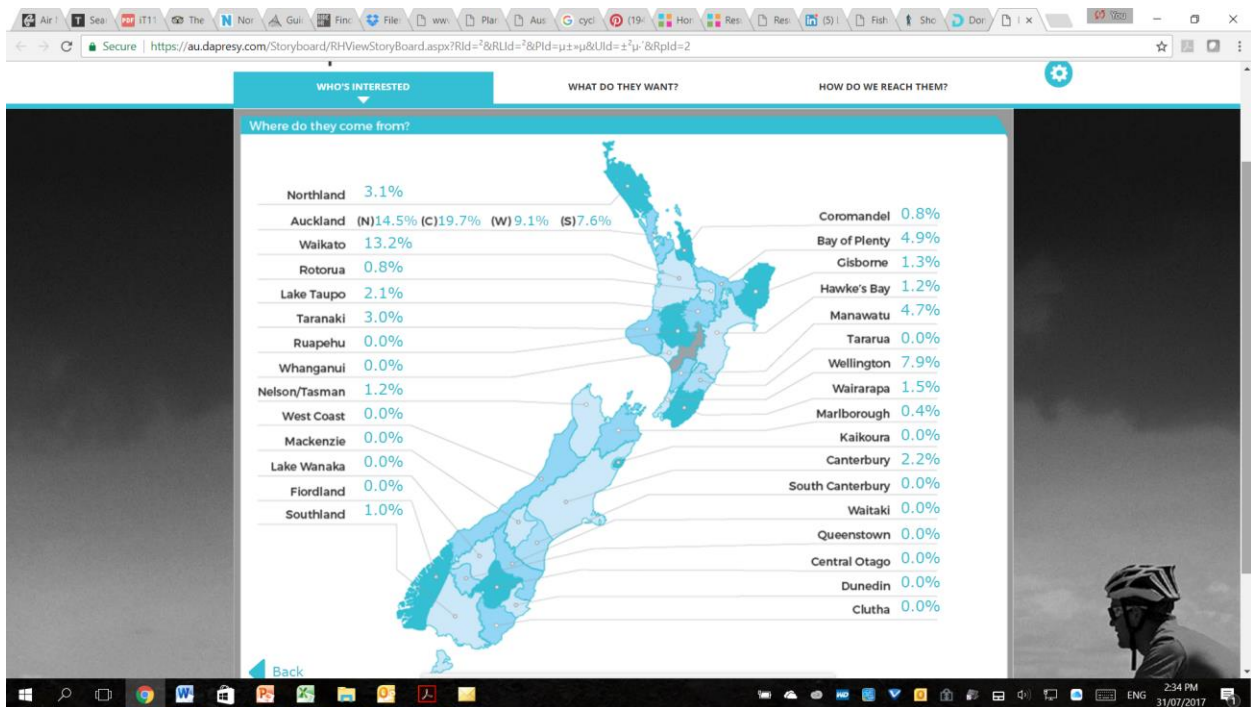
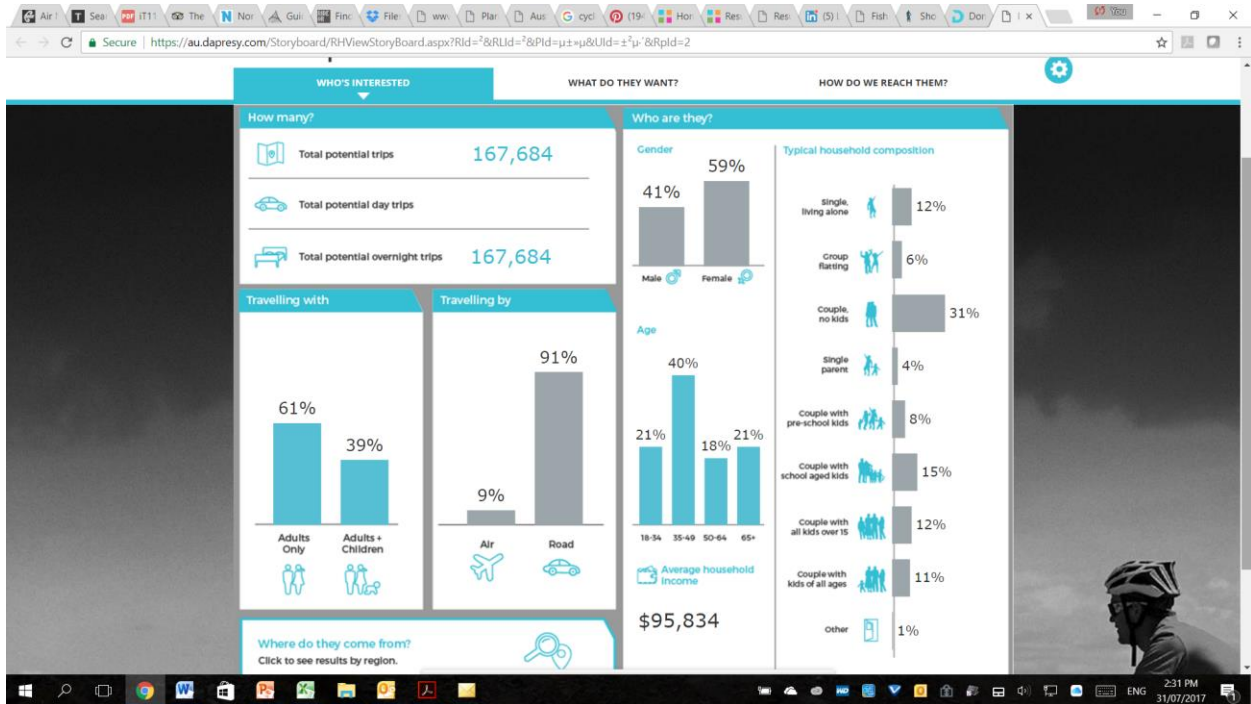
<ul style="list-style-type: none"> <li>• Located in proximity to the coastal environment (2.5km) and other tourist trail activities within the Kauri Coast such as Waipoua Forest</li> <li>• <b>A large range of recreational options are available;</b> camping, motorboats, jet skis, canoeing, kayaking, windsurfing, dinghies, watercraft, swimming, mountain biking, walking, and picnicking</li> <li>• The size of the reserve and Lakes allows adequate space for a range of recreational pursuits</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to determine where to visit within the Domain</li> </ul>
<p><b>Opportunities</b></p>	<p><b>Threats</b></p>
<ul style="list-style-type: none"> <li>• Nature based tourism/eco-tourism/cultural and heritage tourism</li> <li>• <b>Potential as a destination location</b> – end point, or base to explore the wider Kauri Coast</li> <li>• <b>Many more walking, biking and on-water routes could be offered</b> almost like a mountain bike park however most of the 'trails' could be on water i.e. across or around the lakes.</li> <li>• Leverage NZ's green image</li> <li>• <b>Potential to increase cultural awareness and connections to the wider district</b> (working with Te Roroa/Waipoua Forest)</li> <li>• Enclosure/separation of each lake creates diverse recreational and management opportunities</li> <li>• <b>Space for enhancement of existing activities or development of new activities</b> to appeal across all seasons and offer a mix</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Road access issues or restrictions e.g. slips</b></li> <li>• <b>Security issues e.g. thefts of property</b></li> <li>• <b>Reputational damage due to regenerating forest not being as appealing as pristine native forests nearby</b></li> <li>• Management of adjacent land uses</li> <li>• Increased use negatively impacts facilities, the environment and peoples enjoyment of the area</li> <li>• Changing expectations of people for recreation spaces e.g. expect higher quality of facilities, management</li> <li>• Balancing demands of traditional users (locals) vs. new fee paying customers while ensuring the environment is still enjoyable and protected</li> <li>• <b>Impacts of boats on water quality and potential introduction of exotic aquatic species</b></li> <li>• Informal access to lake edge being created by visitor impact on lake edge vegetation</li> <li>• Land based and aquatic weed invasion</li> </ul>

<p>of recreational activities that appeals to a range of demographics</p> <ul style="list-style-type: none"> <li>• Upgrade building facilities for a better user experience e.g. shelter, bike storage, information boards</li> <li>• <b>Make it easier for visitors to book online and via traditional / print channels</b></li> <li>• An event destination – sporting, cultural and <b>also extending events into multi-day “try a new sport / activity”</b></li> <li>• <b>Environmental education</b>, attracting school groups, polytechnics, universities etc. and using the education centre on Lake Waikare</li> <li>• Enhance concessions to provide a range of activities/services – and <b>consider night or starlight experiences to encourage overnight stays</b> e.g. sky photography or underwater lighting on paddle boards / kayaks</li> <li>• <b>Form a group of accommodation providers in this area to support off peak season tourism</b></li> <li>• Connect to future cycle trails in this area</li> <li>• Signage/navigation around the site could be enhanced</li> </ul>	
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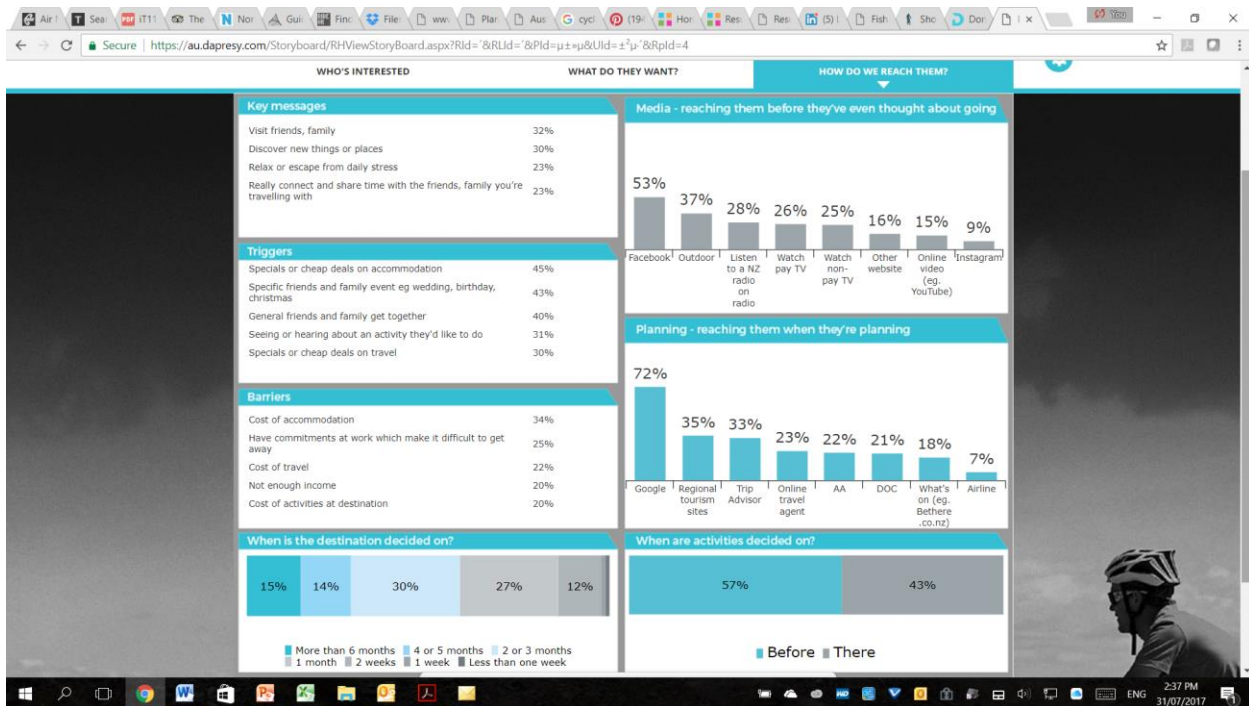
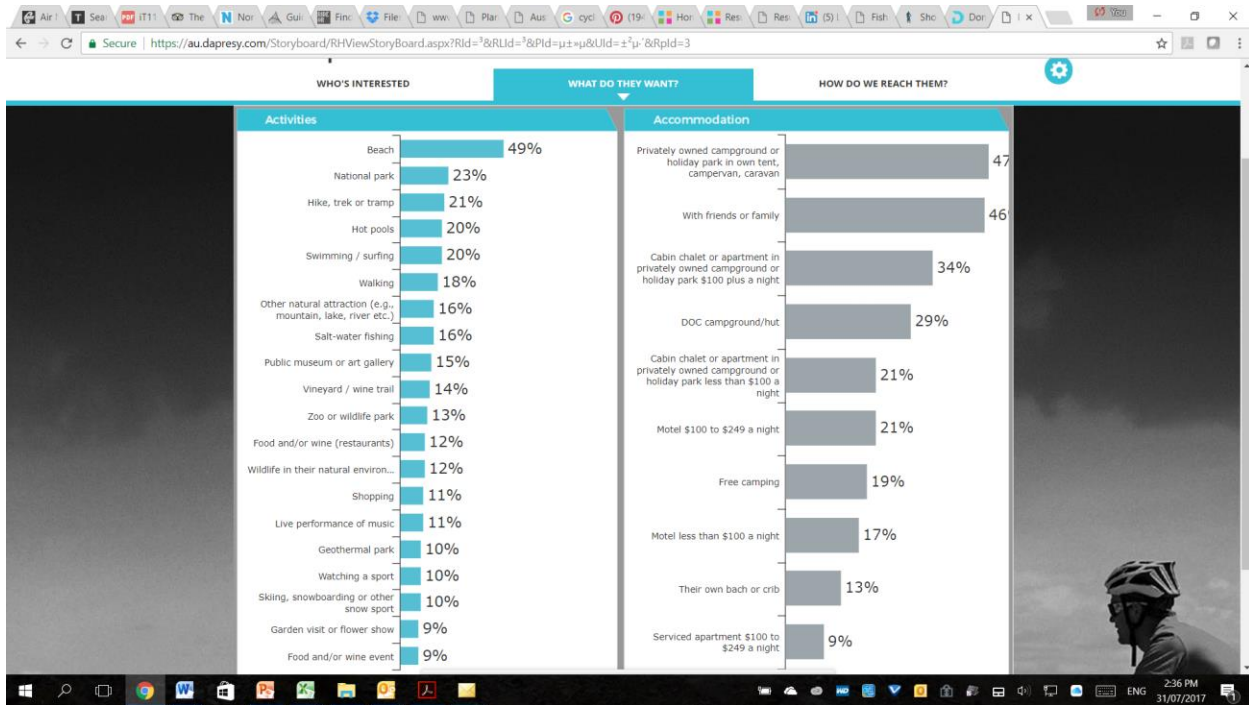
How to exploit these opportunities:	How are we overcoming these barriers?
<ul style="list-style-type: none"> <li>• <b>Develop stories and a clear positioning to reflect and support nature, cultural and heritage based tourism</b></li> <li>• <b>Improve infrastructure to support people staying longer</b> – and then utilise the destination as a location/base</li> <li>• Incorporate cultural heritage in the landscape via signage and pou, and work in partnership with Te Roroa to connect with Waipoua Forest</li> <li>• <b>Develop new routes stories / identities / activities around each of the lakes and water based routes around and across lakes</b> to create diverse recreational and management opportunities</li> <li>• Call for expressions of interest to develop new activities and set up a group of neighbouring businesses to appeal to visitors all year round</li> <li>• Fund and implement building facilities to allow for a better user experience <b>and investigate private investor co-funding e.g. for glamping or a Kathmandu test camp of latest facilities</b></li> <li>• Survey current event organisers who utilise this location to see what they find important then promote this to other event organisers</li> <li>• Promote lake identities, education centre and surrounding area to education sector</li> <li>• Identify potential cycle routes in the area to connect to Kai Iwi and include in the walking and cycling strategy</li> <li>• Review signage &amp; wayfinding of Domain</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor, manage and implement an enhancement programme to address invasive weed species</li> <li>• Planting programme for shade trees</li> <li>• Educate visitors about special qualities of natural environment</li> <li>• Invest in infrastructure facilities</li> <li>• Work with other accommodation providers in the area to enhance low season tourist stays</li> <li>• Build a house to accommodate permanent campground staff on site over winter</li> <li>• Ensure visitors know where local services are located/how far away they are</li> <li>• Improve wayfinding signage</li> <li>• Enforce district plan rules to control land use activity</li> <li>• Monitor and manage increased use of facilities</li> <li>• Survey visitors to see what they want from campground and Domain as a whole</li> <li>• Manage boat entry onto the lakes to ensure water quality and species are protected</li> <li>• Provide well signposted and controlled lake access to ensure lake edge vegetation is protected.</li> </ul>

## Appendix One: Domestic Segmentation Research (sourced from DGIT.nz)

The output screens below apply to: Target destination is Northland (easy for domestic visitors to get here); people open to camping and on a long break of 5+ days either with or without children.















Please note the importance of Facebook.

Segment summaries follow:



New Zealanders can be divided into eight groups (segments) based on their domestic travel behaviours and preferences

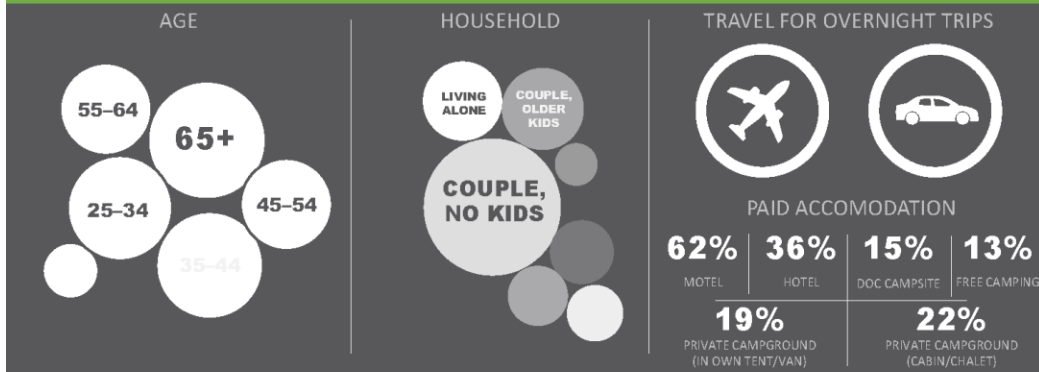
PROPORTION IN POPULATION		☾ AVERAGE NUMBER OF OVERNIGHT TRIPS IN LAST 12 MONTHS	☀ AVERAGE NUMBER OF DAY TRIPS IN LAST 12 MONTHS
 <b>ESCAPE &amp; REWARD</b>	6%	6.1	8.8
 <b>LEARN &amp; UNDERSTAND</b>	5%	5.7	10.5
 <b>EXPLORE NATURE</b>	14%	5.5	9.4
 <b>WINE, FOOD &amp; MUSIC</b>	16%	5.9	8.4
 <b>ADVENTURE &amp; CHALLENGE</b>	4%	8.0	10.8
 <b>WATCHING OR PARTICIPATING</b>	10%	6.5	11.0
 <b>FUN WITH KIDS</b>	16%	5.9	10.7
 <b>FAMILY</b>	21%	3.0	5.4



### 3. EXPLORE NATURE

This segment wants to get outdoors to explore the natural environment. They love exploring the outdoors to discover new places and as a way to relax.

**5.5** OVERNIGHT TRIPS PER YEAR **9.4** DAY TRIPS PER YEAR



WHAT DO THEY WANT TO DO ON HOLIDAY?

- IDEAL ACTIVITIES
- NOT INTERESTED IN



WHAT PLACES DO THEY ALREADY HAVE AN INTEREST IN?



BEST MEDIA CHANNELS TO GET THEM INTERESTED

**OUTDOOR**  
**PAY TV**  
YOUTUBE  
NON-PAY TV  
**FACEBOOK**  
RADIO

KEY BOOKING CHANNELS

**TRIP ADVISOR**  
**ONLINE**  
**TRAVEL AGENT**  
REGIONAL  
TOURISM SITES  
DOC  
AIRLINE

MARKETING PROPOSITION

*"Get away from it all and explore"*

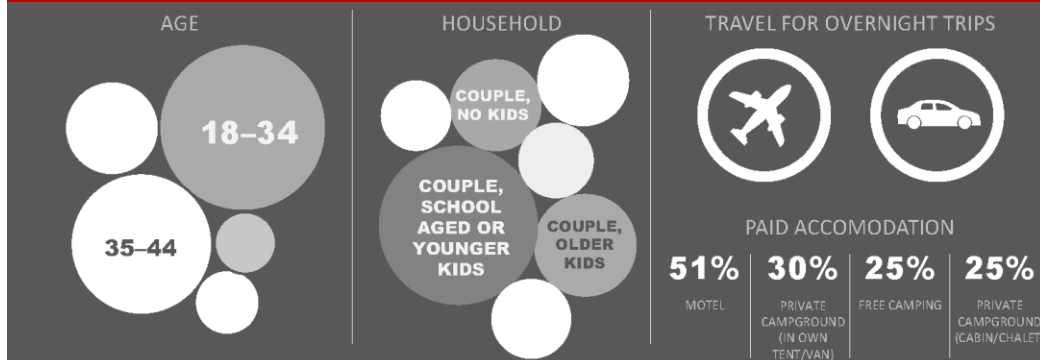
The larger the word(s), the greater the use of that channel.



## 5. ADVENTURE & CHALLENGE

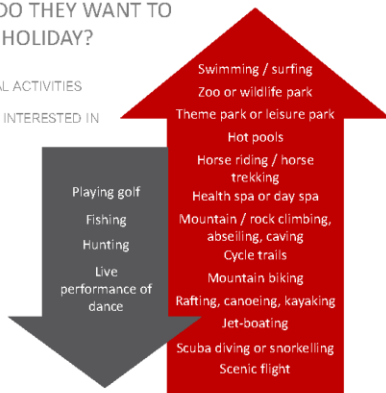
This segment want some excitement – to have an adventure which has an element of challenge. The level of challenge is relative to their abilities. They are seeking two types of challenge - interacting with nature in an active way or a more urban adventure (theme parks). This segment want this excitement or challenge to bond them with their travelling companions.

🌙 8.0 OVERNIGHT TRIPS PER YEAR    ☀️ 10.8 DAY TRIPS PER YEAR

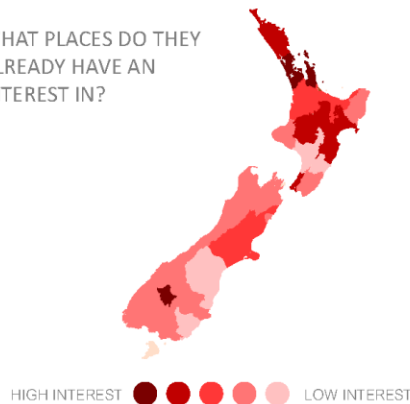


### WHAT DO THEY WANT TO DO ON HOLIDAY?

- IDEAL ACTIVITIES
- NOT INTERESTED IN



### WHAT PLACES DO THEY ALREADY HAVE AN INTEREST IN?



### BEST MEDIA CHANNELS TO GET THEM INTERESTED

**FACEBOOK**  
 PAY TV  
 YOUTUBE OUTDOOR  
 INSTAGRAM

### KEY BOOKING CHANNELS

**TRIP ADVISOR**  
 ONLINE AA  
**TRAVEL AGENT** REGIONAL TOURISM SITES  
 FACEBOOK AIRLINE  
 WHAT'S ON

### MARKETING PROPOSITION

*"Fun with a thrill"*

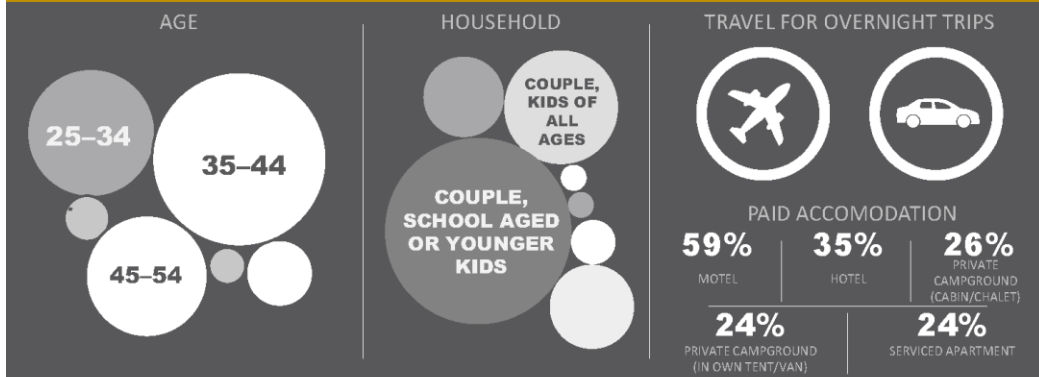
The larger the word(s), the greater the use of that channel.



## 7. FUN WITH KIDS

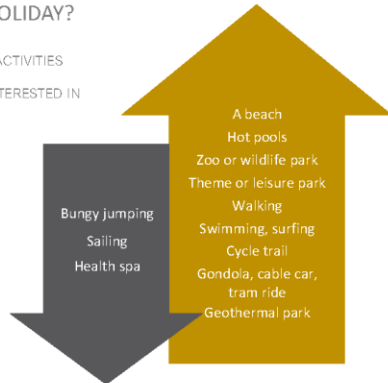
This segment want to bond as a family doing things together.

**5.9** OVERNIGHT TRIPS PER YEAR **10.7** DAY TRIPS PER YEAR

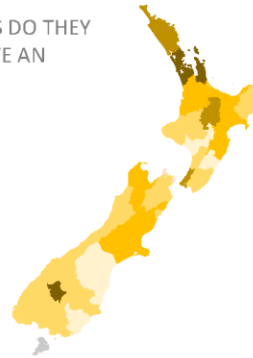


WHAT DO THEY WANT TO DO ON HOLIDAY?

- IDEAL ACTIVITIES
- NOT INTERESTED IN



WHAT PLACES DO THEY ALREADY HAVE AN INTEREST IN?



HIGH INTEREST ●●●●● LOW INTEREST

BEST MEDIA CHANNELS TO GET THEM INTERESTED

**FACEBOOK**  
**PAY TV**  
 RADIO **OUTDOOR**  
 NON PAY TV  
**YOUTUBE**

KEY BOOKING CHANNELS

**TRIP ADVISOR**  
**ONLINE TRAVEL AGENT** AA  
**REGIONAL TOURISM SITES**  
 WHAT'S ON  
 AIRLINE

MARKETING PROPOSITION

*"Creating family memories which will last a lifetime"*

The larger the word(s), the greater the use of that channel.



# 8. FAMILY

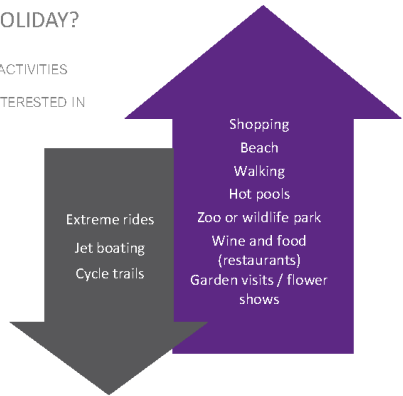
This segment are going to see their family.

**3.0** OVERNIGHT TRIPS PER YEAR **5.4** DAY TRIPS PER YEAR

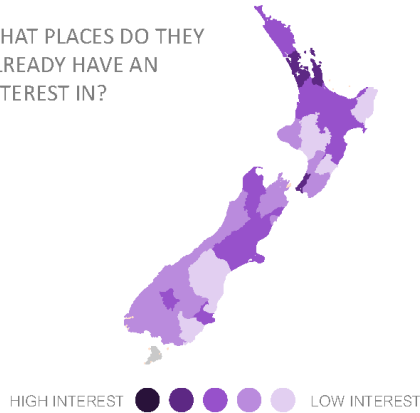


WHAT DO THEY WANT TO DO ON HOLIDAY?

- IDEAL ACTIVITIES
- NOT INTERESTED IN



WHAT PLACES DO THEY ALREADY HAVE AN INTEREST IN?



BEST MEDIA CHANNELS TO GET THEM INTERESTED

**PAY TV**  
 RADIO **FACEBOOK**  
 OUTDOOR  
 NON PAY TV

KEY BOOKING CHANNELS

TRIP ADVISOR **ONLINE TRAVEL AGENT**  
 AIRLINE **AA**

MARKETING PROPOSITION

*"Catch-up with the family"*

The larger the word(s), the greater the use of that channel.

# PROMOTION WORK PLAN 2017-22

KAI IWI LAKES (TAHAROA DOMAIN)







# Promotion work plan

## Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016

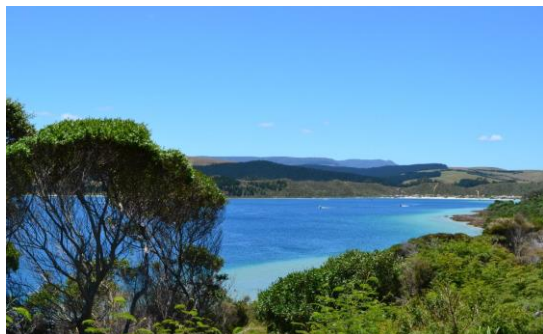
### INTRODUCTION

Kai Iwi Lakes (Taharoa Domain) is recognised as a taonga; a treasure. It is of significant importance to Maori.

The Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan (RMP) has strong aspirations to make it even more exceptional. An objective is to have a diverse range of recreational activities which are compatible with the cultural and ecological values of Kai Iwi Lakes available for all visitors.

The RMP proposes that a promotional strategy is completed and implemented to reinforce Kai Iwi Lakes' reputation as a destination, sitting alongside allied local attractions like Waipoua Forest (The Kauri Coast Experience).

A marketing strategy was commissioned in 2017 to determine what the unique selling point was and to confirm who our potential customer groups/markets are. This strategy has influenced this Promotion Plan.



### DESTINATION POSITIONING

The current offering for visitors is based on "relaxed recreation" where friends / family spend time in summer enjoying the fun to be had at, and around, the lakes as well as each other's company. Events also offer a social as well as nature / recreational experience. These social elements of the holiday experience are not as readily available

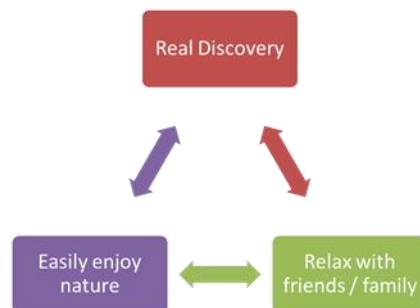
outside the summer peak or events when domestic visitors are back at work / school.

Building visitation outside the peak summer period and events weekends will depend on the destination appeal or reasons for people to spend time at the Kai Iwi Lakes when there are fewer social reasons to stay. Potential exists to provide off-peak visitors with many more reasons to stay or stay longer e.g. by offering new 'trails of discovery' of the domain or events. Other reasons for visiting off-peak would require capital investment such as building or offering glamping options in the warmer autumn months.

A nature-based positioning alone may not be able to compete with other nature based attractions in Northland such as the many beaches and iconic native forests.

So a more aspirational positioning around 'real discovery' that combines local stories / legend with trails of discovery by land and lake offers a new and richer way to present Kai Iwi Lakes / Taharoa Domain. Discovering new ways to enjoy the lakes e.g. hiring the latest kayak or paddle board during a 'demo week' also fits within this positioning.

### Proposed Positioning for Kai Iwi Lakes / Taharoa Domain



There is particular value in setting Kai Iwi Lakes (Taharoa Domain) within a frame of the wider range of attractions found within both Kaipara district and Northland Region. The proximity and biophysical relationship with Waipoua Forest signals the potential for a particularly close promotional presence for the two destinations.

Encouraging events to be held at the Lakes, particularly those that can make good use of its facilities and distinctive characteristics, is another area that can be further developed.

## MANAGING VISITOR PRESSURE

Promotion should be structured so that it does not conflict with the essential values of the place. The emphasis should be one of coming to appreciate the setting of the Lakes and all of their environmental characteristics.

Achieving greater use of the Lakes does not automatically mean more visitor pressure and consequent degradation. Careful management can allow the reserve to strengthen its ecological, recreational and experiential opportunities whilst allowing a larger number of people to share those aspects.



However, there may come a point where the capacity of the Lakes to host still more visitors brings a heightened risk of the core characteristics being significantly compromised. That point is considered to be dramatically above current (2017) use levels, provided that core facilities like toilets and vehicle infrastructure keep pace with growth in visitor numbers. Annual monitoring of the use of the Lakes will therefore be an important task, probably involving a combination camp registration records and traffic counters.



When demand starts approaching the “carrying capacity” of the Lakes environment, there may need to be consideration of a cap on visitors. At

that stage, promotion should be particularly focused upon ways to add value and income from that capped number of visitors.

## TARGET AUDIENCE

Based on the existing origin of visitors to both the Kaipara District and to Kai Iwi Lakes and allowing for the opportunity to attract more international visitors, the following target audiences should form the main focus of marketing activities to grow visitor numbers and nights – ideally outside the peak season.



## CHANNELS OF COMMUNICATION

There are a number of channels to be used to communicate with the above audiences however four overarching channels will work for most of the target market:

1. Digital / online channels:
  - a. An effective website that is also mobile responsive
  - b. [www.facebook.com](http://www.facebook.com)
  - c. [www.tripadvisor.com](http://www.tripadvisor.com)
  - d. Databases (and newsletters) of regular visitors and groups / events.
2. Signage:
  - a. Maintain sign at the corner of SH12 and also 500 metres either side of the turnoff.
  - b. State Highway 1 / State Highway 14 intersection.
  - c. Northern edge of Dargaville.
3. Travel Guides / Maps:
  - a. Northland Visitor Guide
  - b. Ancient Kauri Trail Map
  - c. AA Guide to Northland.
4. I-Sites
  - a. Whangarei
  - b. Bay of Islands
  - c. Omapere

## PROPOSED MARKETING OBJECTIVES

The following marketing objectives are proposed:

- 1. Improve the destination appeal (remarkability) of Kai Iwi Lakes by offering 10 new reasons for visitors to stay, and stay longer, outside the peak season.**

10 new 'trails of discovery' that combine local stories or legend with walking and biking routes on land and on boating or paddling routes on water i.e. around / across the lakes could generate significant new interest as well as provide visitors with a reason to stay and explore more.

- 2. Increase our profile by promoting Kai Iwi Lakes in cost effective channels to appeal to our primary markets**

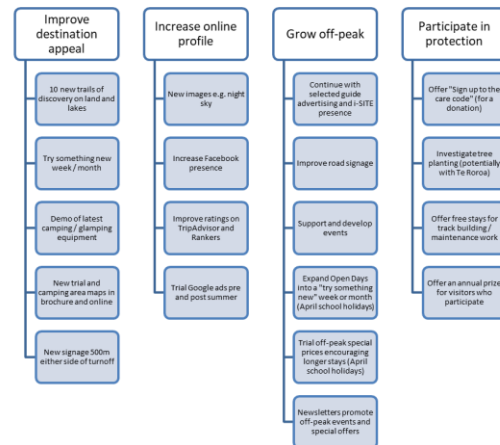
Primary markets area domestic visitors in the Upper North Island and also to international visitors already in Northland. Greater use of digital marketing is recommended and new imagery such as night sky / sunset photos to improve destination appeal.

- 3. Grow visitation outside the peak season by offering more reasons for people to visit, and to stay longer, plus test price based offers that incentivise longer stays e.g. buy two get one night free. Also contact groups and event organisers who might want to run a new event or extend an existing event into a "try it out" weekend or even week encouraging people to test new camping or boating equipment or technology.**
- 4. Encourage visitors to participate in protecting the domain and contributing to environmental restoration projects while staying.** Explore native tree planting options (perhaps working alongside Te Roroa) and also seek to create fun ways for visitors to contribute e.g. by removing litter, weeds or by signing up to the care code in order to go into a seasonal prize draw etc. This is the most effective form of promotion. Visitor surveys show that over 90% of respondents found out about the Lakes from family and friends.

## MARKETING STRATEGIES TO ACHIEVE OBJECTIVES

The current promotional budget of just under \$10,000 is very focused on traditional guide advertising. Some savings e.g. \$2,000 could be made in guide advertising (e.g. smaller ads) and allocated to online marketing activity and new photography e.g. running a competition.

### Proposed Marketing Strategies:



## EVENTS:

Lake Waikare has the ability to be closed to the general public for use for specified periods and combined with the Lake Waikare Centre makes this ideal for events.

There are already a number of events held at the Domain on a regular basis. These include short triathlons, water-oriented Open Days, sailing regattas and waka ama races. Whilst many are of a single day's duration and supported largely by local people, there is scope to configure events so that participants are encouraged to stay at the Domain or in nearby private accommodation, and to make the most of the spectrum of experiences that the site and wider setting offer.



There is also scope to expand Open Days into a "try something new" week or month (April school holidays).

Drawing people in for specific events that may interest them also exposes them to the Domain's charms, leaving them looking to return and speaking to acquaintances of their discovery. One particular benefit of specialist events is that they are often timed outside the peak summer season, so they can be an excellent way to achieve better occupation of camping facilities and general use of the area during the quieter seasons



There is the opportunity to proactively seek out partners to run multiday events at the Domain. These could draw participants from across New Zealand or internationally. Possible avenues include:

1. High level multi-sports events in the mould of the South Island's Coast-to-Coast, but focused around Taharoa Domain, western coast and inland areas of forest.
2. Other specialist sports suited to the site, including long distance swimming; free and scuba diving; and walking, cycling (mountain and road) and running (including cross-country and orienteering) competitions.
3. Other activities that fit well with the characteristics of the Domain, which could include cultural events, craft weekends, low impact festivals and concerts, and motorhome conventions.

#### DELIVERY ON PROMISES

Drawing visitors to the Domain on the expectation of great experiences on offer and the quality of the environment, is a central thread to promotion.



Material has to be realistic and supported by the presentation and management of the site.

It vital that the experiences offered by Kai Iwi Lakes (Taharoa Domain) meet or (better still) exceed the expectations built by marketing stories. This means providing a diverse range of superior recreational opportunities, high quality, well-integrated camping accommodation, great day visitor facilities and a natural environment that is rapidly advancing towards a more pristine state.

KAI IWI LAKES (TAHAROA DOMAIN) MANAGEMENT PLAN 2016 – 2017/18 PROMOTION WORK PLAN								
TASKS	2017/18	2018/19	2019/20	2020/21	2021/22	ANNUAL	\$ ESTIMATE	DONE (date)
Develop USP and confirm who our potential customer groups/markets are	x					\$1,500		July 17
Develop survey tools to collect data	x					n/c		July 17
Continue with selective advertising in Northland Visitor Guide, Ancient Kauri trail, AA Guides	x	x	x	x	x	\$6,000		
Provide brochures at i-Sites Auckland, Whangarei, Bay of Islands, Omapere, Dargaville	x	x	x	x	x	\$600		March 17
Trail off-peak special prices encouraging longer stays such as stay 1 night get 1 free	x	x	x	x	x	TBC		
Increase digital/online presence through mobile responsive <a href="http://www.kaiiwicamp.com">www.kaiiwicamp</a> , <a href="http://www.facebook.com">www.facebook</a> , <a href="http://www.tripadvisor.com">www.tripadvisor</a>	x	x	x	x	x	n/c		
Review Northland Inc's publications including Northlandnz, Ancient Kauri Trail to ensure Kai Iwi is being promoted and information is up-to-date.	x	x				n/c		
Support existing events on website; Avoca Kumara Triathlon, Waka Ama Regatta, Dragon Boats, Sea Scouts sailing regatta, Omamari Beach surfcasting competition etcetera.	x	x	x	x	x	n/c		
Develop new events outside peak season – possible using lake Waikare			x	x	x	TBC		
Destination signs – install new evocative signs near the State Highway 1 / State Highway 14 intersection, north of Waipoua Forest, northern edge of Dargaville.	x	x				\$2,000		
Video – promote Northland Regional Council's video that explains the ecological values and outstanding nature of the Lakes.	x	x	x	x	x			
Brochures – (make available Dargaville Promotions brochure at campground and link to website. Request small changes to brochure to include campground details.	x	x	x	x	x	\$150		
Open Day – continue to support the January Kai Iwi Lakes Open Day.	x	x	x	x	x	\$1,000		
Open Day – develop a second Open Day in the mid-year with a new focus.		x	x	x	x			
Newsletters – develop a database of visitors and send four newsletters per annum.	x	x	x	x	x			
Promote Lake Waikare and Lake Waikare Event Centre for events, educational or recreational activities	x	x	x	x	x	\$500		
Develop 10 new trails of discovery						\$1,000		
Commission new imagery	x					\$1,000		
Newsletters to promote off-peak events and special offers						n/c		
Offer sign up to care code for a donation	x	x	x	x	x	n/c		
Investigate tree planting	x	x	x	x	x	n/c		
Offer free stays for track building/maintenance work								





**File number:** 4702.24.05 **Approved for agenda**

**Report to:** Taharoa Domain Governance Committee

**Meeting date:** **10 August 2017**

**Subject:** **Dune Lakes Galaxias Monitoring Strategy – Endorsement**

**Date of report:** 2 August 2017

**From:** Venessa Anich, General Manager Community

**Report purpose**  **Decision**  **Information**

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

### Summary

Northland's Kai Iwi Lakes are the only home of the Dune Lakes Galaxias (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 Dune Lakes Galaxias (DLG) shares the lakes with two introduced fish species; trout and Gambusia. As trout are known to predate the DLG, it had been suggested that their exclusion from the Lakes would result in an increase in the numbers of DLG. 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. It has been suggested that the threat of predation by trout is keeping the population of Gambusia in check through interactive segregation. This leads to the concern that excluding the trout may result in a boom in the Gambusia population and a corresponding decline in the DLG population. 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.

In response to this problem, Te Kūihi, Te Roroa, Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation have formed a Kai Iwi Lakes Dune Lakes Galaxias Working Group (Working Group). The Working Group have considered the challenges facing the DLG, the present knowledge gaps and the limited resources available to respond to the problem.

The Working Group has identified that the three highest priorities for 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.

To address the above, the Working Group have prepared a Dune Lakes Galaxias Monitoring Strategy (**Attachment 1**) which seeks to better understand the life cycle of the DLG, its interactions with other species and the effect environmental variables have on its survival. The key objective of this study is to advise actions which can be taken to ensure the survival of the DLG.

This Strategy is now presented with this report for endorsement by the Taharoa Domain Governance Committee. The members of the Working Group consider this Strategy is the most appropriate next step in protecting the DLG, given the financial restrictions facing the agencies involved.

Due to the complexity of this matter, the Strategy is 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. The Committee shall be kept informed of actions being pursued as this study progresses.

### **Recommendation**

*That the Taharoa Doman Governance Committee:*

- 1 *Receives the General Manager Community's report 'Dune Lakes Galaxias Monitoring Strategy – Endorsement' dated 2 August 2017; 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 *Endorses the Dune Lakes Galaxias Monitoring Strategy presented with this report for implementation.*

### **Reason for the recommendation**

The Dune Lakes Galaxias Monitoring Strategy presented with this report has been prepared by a working group of Te Kuihi, Te Roroa, Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation. The members of this working group consider that this strategy is the most appropriate next step in protecting the Dune Lakes Galaxias, given the financial restrictions facing the agencies involved.



## Reason for the report

To present the draft Dune Lakes Galaxias Monitoring Strategy to the Taharoa Domain Governance Committee so they may endorse it for implementation.

## Background

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 it is so unique that work is being undertaken to describe it as a separate species. The DLG is found only in the Kai Iwi Lakes.

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. Regrettably, within a few years of trout being released, an unauthorised individual released *Gambusia* (*Gambusia affinis*) into the lakes as well. 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. 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.

In response to this problem, Te Kūihi, Te Roroa, Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation have formed a Kai Iwi Lakes Dune Lakes Galaxias Working Group (Working Group) and are proposing to undertake a study 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 were to cease. As trout are a predator of DLG it was hoped that removing the trout would result in an increase in the population of DLG.

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. 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. 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*.

Because of this uncertainty, a recent literature review by Gee and 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.

## Issues

The Working Group has identified that the three highest priorities for 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.

To address the above, the Working Group have prepared a monitoring strategy (**Attachment 1**) which seeks to better understand the life cycle of the DLG, its interactions with other species and the effect environmental variables have on its survival. The key objective of this study is to advise actions which can be taken to ensure the survival of the DLG.

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. Full details on the proposed research design are set out in **Attachment 1**.

Due to the complexity of this matter, the Strategy is 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. The Committee shall be kept informed of actions being pursued as this study progresses.

## Factors to consider

### *Community views*

The proposed monitoring strategy is the implementation of actions set out in the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (RMP). These actions included the action that all releases of exotic fish (trout) cease by 2018 (no longer being implemented as such – see below). This was met by considerable opposition from the public during consultation on the Draft RMP. The Monitoring Strategy, its implementation and findings are therefore likely to receive a high level of public interest.

### *Policy implications*

The Monitoring 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.”

The Monitoring Strategy contributes towards the following objectives of the RMP:

- To improve the knowledge of native and exotic fish stocks in the lakes and the relationship between them.
- To pro-actively manage the lakes based on scientific research and analysis and ongoing monitoring programmes developed with key stakeholder organisations.

The Monitoring Strategy implements the following actions under the RMP:

- Research and data collation programme scoped and in place with progress monitored. Programme to include researching: native and exotic species relationship;
- Consider implementing cost-effective control measures for mosquito fish. Consider using Lake Kai Iwi as a ‘control’ lake to aid research.
- Co-operate with Northland Regional Council, Department of Conservation and Fish & Game New Zealand to undertake this research.

The Monitoring Strategy responds to the following objective of the RMP:

- 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.

The Monitoring Strategy responds to the following action under the RMP:

- Exotic fish releases cease in all lakes by 2018. Monitor changes in other species as the trout population decreases. Consider re-releasing trout if native species are seen to decline in their absence.

Since the adoption of the RMP, NIWA have completed a literature review (Gee & Franklin 2017) looking at all that is currently known about the DLG, its interactions with other species and giving recommendations for the development of a long-term monitoring plan. The Gee & Franklin 2017 report included the recommendation that trout releases not be made to cease before more was known about the interactions between trout, DLG and Gambusia. The Gee & Franklin (2017) report considered it possible that a sudden reduction in the trout population could result in a boom in the number of Gambusia and a concurrent crash in the population of DLG. The proposed monitoring strategy therefore seeks to better understand the interactions between these species and to investigate control measures for Gambusia before seeking to cease trout releases.

#### ***Financial implications***

The financial constraints of the organisations involved in undertaking this research has been considered when preparing this Strategy. The Working Group’s next step will be to identify what actions from within the strategy should be prioritised, and to begin seeking funding from external sources.

#### ***Legal/delegation implications***

Given that this report seeks the Taharoa Domain Governance Committee to endorse the Dune Lakes

Galaxias Monitoring Strategy for implementation, it is considered that there are no legal or delegation implications.

### Options

The Taharoa Domain Governance Committee has the following options:

**Option A:** Endorse the Dune Lakes Galaxias Monitoring Strategy for implementation.

**Option B:** Advise the Kai Iwi Lakes Dune Lakes Galaxias Working Group how the Dune Lakes Galaxias Monitoring Strategy should be amended before being resubmitted for endorsement.

**Option C:** Refuse to endorse the direction set out in the Dune Lakes Galaxias Monitoring Strategy and suggest an alternative approach.

### Assessment of options

**Option A:** endorsing the Dune Lakes Galaxias Monitoring Strategy for implementation would be a good decision if the Committee supports the direction set out in this Strategy. The direction set out in the draft Strategy has been prepared by a Working Group of representatives from Te Kuihi, Te Roroa, Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation. The draft Strategy is supported by these parties.

**Option B:** advising the Kai Iwi Lakes Dune Lakes Galaxias Working Group how the Dune Lakes Galaxias Monitoring Strategy should be amended before being resubmitted for endorsement, would be a good decision if the Committee considers the strategy requires amendment before implementation.

**Option C:** refusing to endorse the direction set out in the Dune Lakes Galaxias Monitoring Strategy and suggesting an alternative approach would be recommended if the Committee is not satisfied with the approach set out in the draft Strategy. It should be noted however that the direction set out in the draft Strategy has been prepared by a working group of representatives from Te Kuihi, Te Roroa, Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation. The draft Strategy is supported by these parties.

### Assessment of significance

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

### Recommended option

The recommended option is **Option A**

### Next step

The Dune Lakes Galaxias Monitoring Strategy will be implemented by Te Kuihi, Te Roroa, Kaipara District Council, Northland Fish and Game Council, Northland Regional Council and the Department of Conservation, with further updates to the Committee.

### Attachments

- Dune Lakes Galaxias Monitoring Strategy

# Dune Lakes Galaxias

## Monitoring Strategy

### Abstract

*Northland's Kai Iwi Lakes are the only home of the Dune Lakes Galaxias (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 Dune Lakes Galaxias (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 and 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).*

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TDGC 10082017 Endorse Fish Res - Attmt 1 DLG Monitoring Strategy 15062017

## 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 Kūihi 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 were 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).

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Because of this uncertainty, a recent literature review by Gee and 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 Kūihi, 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

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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 Matauranga Maori element into this proposal.

This study has been informed by recommendations from Gee and 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 life cycle 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.

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- 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:*

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- The cause of recent water level decline in 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 photos 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 life cycle 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, etc). 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 life cycle 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 life cycle 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.

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- 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 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.

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*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 life cycle 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.

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- 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 ¼ 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 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 9 m depths in Kai Iwi requiring traps set over a wider area.
- Common bully may enter traps.
- DLG may enter traps if trialled in Taharoa and Waikare (although Pingram found they did not).

### *Research approaches:*

- Trialling control methods are best done in 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 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

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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 Kūihi 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 North Tech.

### 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.

### 6. References

Allen, P.J., Turner, D.J.P. New Zealand (Eds.) 1971: *A survey of the Kai iwi Lakes to examine: (a) (b): The condition of the trout stocks relative to the available food supply; and The suitability of the*

*lake for an additional food supply for trout (in the form of a forage fish) if necessary, Investigation report North Island job.* Freshwater Fisheries Advisory Service, Wellington, N.Z.

Anon 1973: *A survey of Lake Taharoa and Kai-Iwi.* Ministry of Agriculture and Fisheries.

Gee, E. Franklin, P. 2017: *Dune lake galaxias in the Kai Iwi Lakes: Review of status and development of a long term monitoring plan* (No. 2017 HN). NIWA.

Kaipara District Council 2016: *Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan.* Kaipara District Council.

Ian A Kusabs, Brendan J. Hicks, John M Quinn (in press). Adaptation of a traditional Māori harvest method for quantitative sampling of crayfish (kōura; *Paranephrops planifrons*) and small benthic fish (*Gobiomorphus* spp.) in New Zealand streams. In press.

Kusabs, I. A., Quinn, J. M. 2009: Use of a traditional Maori harvesting method, the tau koura, for monitoring koura (freshwater crayfish, *Paranephrops planifrons*) in Lake Rotoiti, North Island, New Zealand. *New Zealand Journal of Marine and Freshwater Research* 43, 713 – 722.

McEwan, A. 2016: *Technical review to inform the Kaipara District Council's Draft Kai Iwi Lakes Management Plan* (No. DOCDM-2759954). Department of Conservation.

Pingram, M.A. 2005: *Ecology of freshwater fish in the littoral zone of Lake Waikere, Kai Iwi Lakes, Northland, New Zealand: for the conservation of the dune lakes galaxias (Galaxias sp.)* Masters Thesis, University of Otago.

Rowe, D.K. 1998: Management trials to restore dwarf inanga show mosquitofish a threat to native fish. *Water & Atmosphere* 6, 10–12.

Rowe, D.K., Champion, P.D., de Winton, M.D. 1999: *Lake management trials for dwarf inanga (Galaxias gracilis) and a rare plant (Hydatella inconspicua) in Northland dune lakes* (No. DOC90202). NIWA.

Rowe, D.K., Chisnall, B.L. 1995: Conservation status of dwarf inanga (*Galaxias gracilis*) and recommendations for its future management. *NIWA science and technology series.* NIWA and Department of Conservation, Hamilton, NZ.

**File number:** 4702.24.02.02 **Approved for agenda**   
**Report to:** Taharoa Domain Governance Committee  
**Meeting date:** **10 August 2017**  
**Subject:** **Infrastructure Development Plan and 2017/2018 work programme**  
**Date of report:** 3 August 2017  
**From:** Sue Hodge, Parks and Community Manager  
**Report purpose**  **Decision**  **Recommendation**  **Information**  
**Assessment of significance**  **Significant**  **Non-significant**

### Summary

The implementation of Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (the RMP) includes a range of capital works improvements to be undertaken over the 10 year life of the plan and generally funded from Financial Contributions (not the general rate).

Council is currently developing the draft 2018-2028 Long Term Plan (LTP) ready for public consultation early next year. The LTP will determine what capital funding will be available to implement the RMP.

This report seeks to identify all the capital projects from the RMP so that sufficient funds are set aside in the 2018-2028 LTP to enable the continued implementation of the RMP over the next 10 years. Based on the 10 year Infrastructure Development Plan (**Attachment 1**) it is recommended that Council funds the development of the Kai Iwi Lakes in the draft 2018-2028 LTP at a slightly lower level of funding (\$180,000 per annum rather than \$198,000 per annum).

It is also recommended the 2017/2018 works programme includes the following projects:

Projects	2017/2018
Manager's office/reception and limited accommodation	\$ 50,000
Tracks per annum	\$ 50,000
Tractor	\$ 50,000
Day Visitor toilets - Lake Waikare	\$ 40,000
Upgrade boat launching facilities at Marina Bay	\$ 30,000
Bollards to protect new plantings	\$ 20,000
Improved signage to inform day visitors/interpretation	\$ 20,000
Restoration Plants	\$ 20,000
Install UV water treatment system (Pine Beach, Prom, Lake Waik)	\$ 15,000
Development of a biosecurity inspection area at Marina Bay	\$ 15,000
Investigate and obtain boat ramp consents	\$ 10,000
Camper van dump sites	\$ 10,000
New signage SH12/Omamari, north Dargaville and Brynderwyns	\$ 10,000

### Recommendation

*That the Taharoa Domain Governance Committee:*

- 1 *Receives the Parks and Community Manager's report 'Communication Plan feedback' dated 19 January 2017 and the information contained therein; 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 *Approves the 10 year Infrastructure Development Plan and;*
- 4 *Recommends that Council funds the development of Kai Iwi Lakes in the draft 2018-2028 LTP at a slightly lower level of funding (\$180,000 per annum rather than \$198,000 per annum) and;*
- 5 *Confirms the 2017/2028 works programme as set out in the 10 year Infrastructure Development Plan.*

#### **Reason for the recommendation**

To set the direction and timing for the development of Kai Iwi Lakes as set out in the Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan (2016).

#### **Reason for the report**

To seek the Committee's direction regarding the development of the 10 year Infrastructure Development Plan and to confirm the 2017/2018 capital works programme.

#### **Background**

The implementation of Kai Iwi Lakes (Taharoa Domain) Reserve Management Plan 2016 (the RMP) includes a number of small capital works improvements to be undertaken over the 10 year life of the plan and generally funded from Financial Contributions (not general rate).

To help prioritise these initiatives the RMP proposes;

1. Development of an Infrastructure Development Plan to include design and feasibility assessment for new/extended visitor facilities (including accommodation) and recreational opportunities to generate a wider spread of use and revenues throughout the seasons.
2. Development of a landscape and infrastructure plan to effectively manage visitor needs including:
  - Toilets and picnic facilities
  - Camp ground improvements including more powered sites

The plan also requires:

- Watercraft launching facilities to be limited to single defined points at Marina Bay and Lake Waikare with biosecurity checking points.
- Extension of a network of walking and cycling tracks.

In 2017/2018 the capital works budgets are:

- |                                  |           |
|----------------------------------|-----------|
| • Kai Iwi camp ground facilities | \$150,000 |
| • Taharoa Domain – implement RMP | \$100,000 |
| • New tractor                    | \$50,000  |
| • Public Toilets – Lake Waikare  | \$40,000  |

Council is currently developing the draft 2018/2028 Long Term Plan (LTP) ready for public consultation early next year. The LTP will determine what capital funding will be available to implement the RMP.

This report seeks to identify all the capital projects from the RMP so that sufficient funds are set aside in the LTP to enable the continued implementation of the RMP over the next 10 years.

This report also seeks to confirm this year's capital works programme.

### Issues

The intent of the RMP is to enable Kai Iwi Lakes and its environment to be enjoyed by all visitors while simultaneously enhancing the area and reducing risks through knowledge and active management. Getting this balance right is a challenge.

Many of the suggested capital projects such as tracks, boat ramp up-grade, look outs, bird hide are low key and designed to improve the visitor experience by adding things to do (destination appeal) and encouraging repeat visits to the District outside of the peak period.

Some projects, such as toilets and biosecurity inspection areas, are required to protect the environment from the effects from visitors using the lakes, tracks and picnic areas.

One of the larger projects is a house to provide an on-site presence for safety of visitors, improved revenue collection and to reduce vandalism.

A full 10 year Infrastructure Development Plan (**Attachment 1**) has been developed to capture all projects from the RMP. This plan also compares the 2015/2025 LTP funding with the draft 2018-2028 LTP funding.

The original 2015-2025 LTP year 4-10	\$1, 680,000
Extend by 3 years with Premier Park funding only	\$ 300,000
<b>Total</b>	<b>\$1,980,000 being \$198,000/annum</b>

<b>Funds proposed in the 2018-2028 LTP</b>	<b>\$1,800,000 being \$180,000/annum</b>
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This is basically funding at the same level. Based on the Infrastructure Development Plan it is recommended the 2017/2018 works programme is as follows:

<b>Projects</b>	<b>2017/2018</b>
Manager's office/reception and limited accommodation	\$ 50,000
Tracks per annum	\$ 50,000
Tractor	\$ 50,000
Day Visitor toilets - Lake Waikare	\$ 40,000
Upgrade boat launching facilities at Marina Bay	\$ 30,000
Bollards to protect new plantings	\$ 20,000
Improved signage to inform day visitors/interpretation	\$ 20,000
Restoration Plants	\$ 20,000
Install UV water treatment system (Pine Beach, Prom, Lake Waikare)	\$ 15,000
Development of a biosecurity inspection area at Marina Bay	\$ 15,000
Investigate and obtain boat ramp consents	\$ 10,000
Camper van dump sites	\$ 10,000
New signage SH12/Omamari, north Dargaville and Brynderwyns	\$ 10,000

## **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***

The current Financial Contribution (Use of) policy states 40% collected will be allocated to district-wide purposes. District-wide purposes has been defined as those reserves and open spaces that are classified as premier or key reserves in the Reserves and Open Space Strategy (ROSS), and any facilities on reserves that cater for the whole district (tend to be one of a kind). Kai Iwi Lakes has been defined as a District –wide purpose and therefore Financial Contribution can be used for its development.

### ***Financial implications***

Nil. The funding source for implementing the Infrastructure Development Plan is Financial Contributions. The full implications will be considered as part of the 2018-2028 LTP deliberations and the funding proposed is consistent, although slightly lower, with the allocations in the 2015/2025 LTP.

### ***Legal/delegation implications***

There are no delegation issues; the Committee has delegated authority from Council to govern the Kai Iwi lakes (Taharoa Domain) in terms of the RMP.

## **Options**

The Committee has the following options:

**Option A** Approves the 10 year Infrastructure Development Plan, the level of funding proposed in the draft 2018-2028 LTP and the 2017/2028 works programme.

**Option B** Declines to approve the 10 year Infrastructure Development Plan, the recommended level of funding in the draft 2018-2028 LTP and the 2017/2028 works programme.

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**Option C** Approves a modified 10 year Infrastructure Development Plan, and therefore modified funding in the draft 2018-2028 LTP and possible a modified 2017/2028 works programme.

#### **Assessment of options**

Option A. Approving the 10 year Infrastructure Development Plan, the recommended level of funding in the draft 2018-2028 LTP and the 2017/2028 works programme ensures the RMP is implemented over the 10 year life of the plan. It sets the priorities and the funding enables staff to implement the RMP.

Option B. Declining to approve the 10 year Infrastructure Development Plan, the recommended level of funding in the draft 2018-2028 LTP and the 2017/2028 works programme will delay the implementation of the RMP.

Option C. Approving a modified version of the 10 year Infrastructure Development Plan, the recommended level of funding in the draft 2018-2028 LTP and the 2017/2028 works programme may or may not ensure the RMP is implemented.

#### **Assessment of significance**

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

#### **Recommended option**

The recommended option is Option A or C.

#### **Next step**

Council Officers will implement the 2017/2028 works programme and ensure funds are set aside in the draft 2018-2028 LTP.

YR	0	1	2	3	4	5	6	7	8	9	10
Projects	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028
Manager's office/reception and limited accommodation	\$ 50,000										
Tracks per annum	\$ 50,000	\$ 60,000	\$ 60,000								
Tractor	\$ 50,000										
Day Visitor toilets - Lake Waikare	\$ 40,000										
Upgrade boat launching facilities at Marina Bay	\$ 30,000										
Bollards to protect new plantings	\$ 20,000										
Improved signage to inform day visitors/interpretation	\$ 20,000		\$ 10,000	\$ 10,000	\$ 10,000		\$ 10,000				
Restoration Plants	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Install UV water treatment system (Pine Beach, Prom, Lake Waikare)	\$ 15,000										
Development of a biosecurity inspection area at Marina Bay	\$ 15,000										
Investigate and obtain boat ramp consents	\$ 10,000										
Camper van dump sites	\$ 10,000										
New signage SH12/Omamari, north Dargaville and Brynderwyns	\$ 10,000	\$ 5,000	\$ 5,000								
Day Visitor toilets - Pine Beach north old changing rooms		\$ 35,000									
Day Visitor toilets - Sandy Bay (Dry Vault)					\$ 60,000						
Day Visitor toilets - Marina Bay (Dry Vault)		\$ 60,000									
Day Visitor toilets -Pine Beach/Lake Kai Iwi (Dry Vault)					\$ 60,000						
Pedestrian boardwalk access Promenade Point					\$ 20,000	\$ 20,000					
Lookouts on ridges					\$ 10,000	\$ 10,000	\$ 10,000				
Bird Hide near west of Lake Kai Iwi					\$ 10,000	\$ 10,000	\$ 10,000				
Small decks/platforms around lakes for swimming (each)					\$ 10,000	\$ 10,000	\$ 10,000				
Business Plan, Resource & Building Consent Rangers house	\$ 10,000										
Power up-grade	\$ 10,000										
Ranger's house to provide 24 hour staff presence		\$ 150,000	\$ 150,000								
Storage shed and area adjacent to Ranger's house	\$ 80,000										
Interpretation Shelter/ Interpretation panels					\$ 20,000	\$ 20,000					
Nursery to grow restoration plants						\$ 20,000					
Extend powered sites	\$ 20,000				\$ 20,000						
Mountain Bike trails (5km trails)				\$ 70,000		\$ 50,000					
Business Plan accomadation						\$ 100,000					
Development of Visitor accomadation (cabins)							\$ 40,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000
Future Domain projects					\$ 10,000						
<b>Total Expenditure</b>	<b>\$ 340,000</b>	<b>\$ 300,000</b>	<b>\$ 245,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>
<b>LTP 2018-2028</b>											
Taharoa Domain	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Kai Iwi Camp Ground	\$ 150,000	\$ 200,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -
Lake Waikare - toilets	\$ 40,000										
Tractor	\$ 50,000										
<b>Total</b>	<b>\$ 340,000</b>	<b>\$ 300,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>
<b>LTP 2015-2025</b>											
Kai Iwi facilities	\$ 150,000	\$ 180,000	\$ 200,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000				
Taharoa Domain	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
<b>Total</b>	<b>\$ 250,000</b>	<b>\$ 280,000</b>	<b>\$ 300,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>	<b>\$ 100,000</b>

**5 Closure**

**Kaipara District Council  
Dargaville**