



**Far North  
District Council**



**Te Kaunihera o Tai Tokerau ki te Raki**

# **AGENDA**


## **Infrastructure Committee Meeting**

**Wednesday, 5 May 2021**

**Time:** 9.30 am  
**Location:** Council Chamber  
Memorial Avenue  
Kaikohe

**Membership:**

Cr Felicity Foy - Chairperson  
Mayor John Carter  
Deputy Mayor Ann Court  
Cr Dave Collard  
Cr Mate Radich  
Cr Rachel Smith  
Cr Kelly Stratford  
Cr John Vujcich  
Kaikohe-Hokianga Community Board Chairperson Mike Edmonds  
Te Hiku Community Board Chairperson Adele Gardner

	<b>Authorising Body</b>	Mayor/Council
	<b>Status</b>	Standing Committee
<b>COUNCIL COMMITTEE</b>	<b>Title</b>	Infrastructure Committee Terms of Reference
	<b>Approval Date</b>	7 May 2020
	<b>Responsible Officer</b>	Chief Executive

### Purpose

The purpose of the Infrastructure Committee (the Committee) is to ensure cost effective, quality and sustainable infrastructure decisions are made to meet the current and future needs of Far North communities and that Councils infrastructure assets are effectively maintained and operated.

The Committee will review the effectiveness of the following aspects:

- Affordable core infrastructure to support healthy and sustainable living;
- Operational performance including monitoring and reporting on significant infrastructure projects
- Delivery of quality infrastructure and district facilities
- Financial spend and reprogramming of capital works
- Property and other assets

To perform his or her role effectively, each Committee member must develop and maintain his or her skills and knowledge, including an understanding of the Committee's responsibilities, Councils' infrastructure assets such as roading, three waters and district facilities.

### Membership

The Council will determine the membership of the Infrastructure Committee.

The Infrastructure Committee will comprise of at least six elected members (one of which will be the chairperson).

Mayor Carter  
 Felicity Foy – Chairperson  
 Ann Court – Deputy Chairperson  
 Dave Collard  
 Kelly Stratford  
 John Vujcich  
 Mate Radich  
 Rachel Smith  
 Mike Edmonds  
 Adele Gardner

Non-appointed councillors may attend meetings with speaking rights, but not voting rights.

### Quorum

The quorum at a meeting of the Infrastructure Committee is 5 members.

### Frequency of Meetings

The Infrastructure Committee shall meet every 6 weeks, but may be cancelled if there is no business.

**Power to Delegate**

The Infrastructure Committee may not delegate any of its responsibilities, duties or powers.

**Committees Responsibilities**

The Committees responsibilities are described below:

**Quality infrastructure and Facilities**

- Assess and provide advice to Council on strategic issues relating to the provision of Council's infrastructural activities and district facilities
- Review, and recommend to Council, policy and strategies for the delivery of infrastructural asset services
- Monitor achievement of outcomes included in the Infrastructure Strategy and other infrastructure strategies eg District Transport Strategy
- Ensure that Council protects its investment in its infrastructural assets in accordance with accepted professional standards
- Monitor the risks, financial and operational performance of the Council's infrastructural activities and facilities
- Monitor major contract performance measures/key result areas (KRAs)

**Significant Projects – spend, monitoring and reporting**

- Monitor significant projects
- Approve budget overspend (above tolerance levels in the CE delegations) and any reprogramming of capex for a project or programme provided that:
  - The overall budget is met from savings
  - The overall budget for capex is not exceeded. Where this is not the case, the Committee must either:
    - Recommend to Council that additional funding is approved (outside the Annual Plan or Long Term Plan process), or
    - Recommend as part of the next round of Long Term Plan or Annual Plan process that the funding is considered for inclusion.
- Approve tenders and contracts provided they are:
  - Up to \$3 million,
  - in accordance with the current year's plan, whether that be Annual Plan or Long Term Plan, and
  - deemed low by the Significance and Engagement Policy

**Compliance**

- Ensure that operational functions comply with legislative requirements and Council policy
- Ensure that consents associated with Council's infrastructure are being met and renewals are planned for

**Service levels (non regulatory)**

- Recommend service level changes and new initiatives to the Long Term and Annual Plan processes.

**Relationships**

- Monitoring Council's relationship with the Northland Transportation Alliance
  - Receive quarterly performance reports
- Monitoring Council's relationship with the Far North Waters Alliance Partner

**Property**

- Recommend to Council the acquisition or disposal of assets.
- Approve new leases and lease renewals (of non-reserve land), in accordance with the current years' plan, whether that be Annual Plan or Long Term Plan.

Receive updates on changes to national and regional policies that impact on Council provision of infrastructure and where appropriate make recommendation to Council.

**Rules and Procedures**

Council's Standing Orders and Code of Conduct apply to all the committee's meetings.

**Annual reporting**

The Chair of the Committee will submit a written report to the Chief Executive on an annual basis. The review will summarise the activities of the Committee and how it has contributed to the Council's governance and strategic objectives. The Chief Executive will place the report on the next available agenda of the governing body.

**INFRASTRUCTURE COMMITTEE - MEMBERS REGISTER OF INTERESTS**

<b>Name</b>	<b>Responsibility (i.e. Chairperson etc)</b>	<b>Declaration of Interests</b>	<b>Nature of Potential Interest</b>	<b>Member's Proposed Management Plan</b>
<b>Hon John Carter QSO</b>	Board Member of the Local Government Protection Programme	Board Member of the Local Government Protection Program		
	Carter Family Trust			
<b>Felicity Foy (Chair)</b>	Flick Trustee Ltd	I am the director of this company that is the company trustee of Flick Family Trust that owns properties in Cable Bay, and Allen Bell Drive - Kaitia.		
	Elbury Holdings Limited	This company is directed by my parents Fiona and Kevin King.	This company owns several dairy and beef farms, and also dwellings on these farms. The Farms and dwellings are located in the Far North at Kaimaumau, Bird Road/Sandhills Rd, Wireless Road/ Puckey Road/Bell Road, the Awanui Straight and Allen Bell Drive.	
	Foy Farms Partnership	Owner and partner in Foy Farms - a farm on Church Road, Kaingaroa		
	Foy Farms Rentals	Owner and rental manager of Foy Farms Rentals for dwellings on Church Road, Kaingaroa and dwellings on Allen Bell Drive, Kaitia, and property on North Road, Kaitia, one title contains a cell phone tower.		
	King Family Trust	This trust owns several titles/properties at Cable Bay, Seaview Rd/State Highway 10 and Ahipara - Panorama Lane.	These trusts own properties in the Far North.	
	112 Commerce Street Holdings Ltd	Owner of commercial property in Commerce Street Kaitia.		
	Foy Property Management Ltd	Owner of company that manages properties owned by Foy Farms Rentals and Flick Family Trust.		

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Previous employment at FNDC 2007-16	I consider the staff members at FNDC to be my friends		
	Shareholder of Coastline Plumbing NZ Limited			
<b>Felicity Foy - Partner</b>	Director of Coastline Plumbing NZ Limited			
	Friends with some FNDC employees			
<b>Deputy Mayor Ann Court (Deputy)</b>	Waipapa Business Association	Member		Case by case
	Warren Pattinson Limited	Shareholder	Building company. FNDC is a regulator and enforcer	Case by case
	Kerikeri Irrigation	Supplies my water		No
	District Licensing	N/A	N/A	N/A
	Top Energy Consumer Trust	Trustee	Crossover in regulatory functions, consenting economic development and contracts such as street lighting.	Declare interest and abstain from voting.
	Ann Court Trust	Private	Private	N/A
	Waipapa Rotary	Honorary member	Potential community funding submitter	Declare interest and abstain from voting.
	Properties on Onekura Road, Waipapa	Owner Shareholder	Any proposed FNDC Capital works or policy change which may have a direct impact (positive/adverse)	Declare interest and abstain from voting.
	Property on Daroux Dr, Waipapa	Financial interest	Any proposed FNDC Capital works or policy change which may have a direct impact (positive/adverse)	Declare interest and abstain from voting.
	Flowers and gifts	Ratepayer 'Thankyou'	Bias/ Pre-determination?	Declare to Governance
	Coffee and food	Ratepayers sometimes 'shout' food and beverage	Bias or pre-determination	Case by case
	Staff	N/A	Suggestion of not being impartial or pre-determined!	Be professional, due diligence, weigh the evidence. Be thorough, thoughtful, considered impartial and balanced. Be fair.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Warren Pattinson	My husband is a builder and may do work for Council staff		Case by case
<b>Ann Court - Partner</b>	Warren Pattinson Limited	Director	Building Company. FNDC is a regulator	Remain at arm's length
	Air NZ	Shareholder	None	None
	Warren Pattinson Limited	Builder	FNDC is the consent authority, regulator and enforcer.	Apply arm's length rules
	Property on Onekura Road, Waipapa	Owner	Any proposed FNDC capital work in the vicinity or rural plan change. Maybe a link to policy development.	Would not submit. Rest on a case by case basis.
<b>David Collard</b>	Snapper Bonanza 2011 Limited	45% Shareholder and Director		
	Trustee of Te Ahu Charitable Trust	Council delegate to this board		
<b>Mate Radich</b>	No form received			
<b>Rachel Smith</b>	Friends of Rolands Wood Charitable Trust.	Trustee.		
	Mid North Family Support.	Trustee.		
	Property Owner.	Kerikeri.		
	Friends who work at Far North District Council.			
	Kerikeri Cruising Club.	Subscription Member and Treasurer.		
	Vision Kerikeri	Financial Member		
<b>Rachel Smith (Partner)</b>	Property Owner.	Kerikeri.		
	Friends who work at Far North District Council.			
	Kerikeri Cruising Club.	Subscription Member.		
	Vision Kerikeri	Financial Member		
	Town and General Groundcare Limited	Director, Shareholder		
<b>Kelly Stratford</b>	KS Bookkeeping and Administration	Business Owner, provides book keeping, administration and development of environmental management plans	None perceived	Step aside from decisions that arise, that may have conflicts
	Waikare Marae Trustees	Trustee	Maybe perceived conflicts	Case by case basis
	Bay of Islands College	Parent Elected Trustee	None perceived	If there was a conflict, I will step

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
				aside from decision making
	Karetu School	Parent Elected Trustee	None perceived	If there was a conflict, I will step aside from decision making
	Māori title land – Moerewa and Waikare	Beneficiary and husband is a shareholder	None perceived	If there was a conflict, I will step aside from decision making
	Sister is employed by Far North District Council			Will not discuss work/governance matters that are confidential
	Gifts - food and beverages	Residents and ratepayers may 'shout' food and beverage	Perceived bias or predetermination	Case by case basis
	Taumarere Counselling Services	Advisory Board Member	May be perceived conflicts	Should conflict arise, step aside from voting
	Sport Northland	Board Member	May be perceived conflicts	Should conflict arise, step aside from voting
<b>Kelly Stratford - Partner</b>	Chef and Barista	Opua Store	None perceived	
	Māori title land – Moerewa	Shareholder	None perceived	If there was a conflict of interest, I would step aside from decision making
<b>John Vujcich</b>	Board Member	Pioneer Village	Matters relating to funding and assets	Declare interest and abstain
	Director	Waitukupata Forest Ltd	Potential for council activity to directly affect its assets	Declare interest and abstain
	Director	Rural Service Solutions Ltd	Matters where council regulatory function impact of company services	Declare interest and abstain
	Director	Kaikohe (Rau Marama) Community Trust	Potential funder	Declare interest and abstain
	Partner	MJ & EMJ Vujcich	Matters where council regulatory function impacts on partnership owned assets	Declare interest and abstain
	Member	Kaikohe Rotary Club	Potential funder, or impact on Rotary projects	Declare interest and abstain
	Member	New Zealand Institute of Directors	Potential provider of training to Council	Declare a Conflict of Interest



Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	Institute of IT Professionals	Unlikely, but possible provider of services to Council	Declare a Conflict of Interest
<b>Mike Edmonds</b>	Chair	Kaikohe Mechanical and Historic Trust	Council Funding	Decide at the time
	Committee member	Kaikohe Rugby Football and Sports Club	Council Funding	Withdraw and abstain
<b>Adele Gardner</b>	N/A - FNDC Honorarium			
	Te Hiku Education Trust	Trustee		
	Te Ahu Charitable Trust	Trustee		
	ST Johns Kaitaia Branch	Trustee/ Committee Member		
	Te Hiku Sports Hub Committee	Committee Member		
	I know many FNDC staff members as I was an FNDC staff member from 1994-2008.			
<b>Partner of Adele Gardner</b>	N/A as Retired			



**Far North District Council**  
**Infrastructure Committee Meeting**  
**will be held in the Council Chamber, Memorial Avenue, Kaikohe on:**  
**Wednesday 5 May 2021 at 9.30 am**

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**Te Paeroa Mahi / Order of Business**

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**1 KARAKIA TIMATANGA – OPENING PRAYER****2 NGA WHAKAPĀHA ME NGĀ PĀNGA MEMA / APOLOGIES AND DECLARATIONS OF INTEREST**

Members need to stand aside from decision-making when a conflict arises between their role as a Member of the Committee and any private or other external interest they might have. This note is provided as a reminder to Members to review the matters on the agenda and assess and identify where they may have a pecuniary or other conflict of interest, or where there may be a perception of a conflict of interest.

If a Member feels they do have a conflict of interest, they should publicly declare that at the start of the meeting or of the relevant item of business and refrain from participating in the discussion or voting on that item. If a Member thinks they may have a conflict of interest, they can seek advice from the Chief Executive Officer or the Team Leader Democracy Support (preferably before the meeting).

It is noted that while members can seek advice the final decision as to whether a conflict exists rests with the member.

**3 TE TONO KŌRERO / DEPUTATION**

A representative from Northland Transport Allinace will present on major applications that have been lodged with the Far North District Council.

## 4 CONFIRMATION OF PREVIOUS MINUTES

### 4.1 CONFIRMATION OF PREVIOUS MINUTES

**File Number:** A3155852

**Author:** Kim Hammond, Meetings Administrator

**Authoriser:** Aisha Huriwai, Team Leader Democracy Services

#### TAKE PŪRONGO / PURPOSE OF THE REPORT

The minutes of the previous Infrastructure Committee meeting are attached to allow the Committee to confirm that the minutes are a true and correct record.

#### TŪTOHUNGA / RECOMMENDATION

**That the Infrastructure Committee confirm that the minutes of the:**

- a) **Infrastructure Committee 24 March 2021, be confirmed as a true and correct record.**
- b) **Extraordinary Infrastructure Committee 27 April 2021, be confirmed as a true and correct record.**

#### 1) TĀHUHU KŌRERO / BACKGROUND

Local Government Act 2002 Schedule 7 Section 28 states that a local authority must keep minutes of its proceedings. The minutes of these proceedings duly entered and authenticated as prescribed by a local authority are prima facie evidence of those meetings.

#### 2) MATAPAKI ME NGĀ KŌWHIRINGA / DISCUSSION AND OPTIONS

The minutes of the meeting are attached. Far North District Council Standing Orders Section 27.3 states that no discussion shall arise on the substance of the minutes in any succeeding meeting, except as to their correctness.

#### Take Tūtohunga / Reason for the recommendation

The reason for the recommendation is to confirm the minutes are a true and correct record of the previous meeting.

#### 3) PĀNGA PŪTEA ME NGĀ WĀHANGA TAHUA / FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

There are no financial implications or the need for budgetary provision as a result of this report.

#### ĀPITI HANGA / ATTACHMENTS

1. **2021-03-24 Infrastructure Committee Unconfirmed Minutes - A3123114**  
2. **2021-04-27 Extraordinary Infrastructure Committee Unconfirmed Minutes - A3169161**  

**Hōtaka Take Ōkawa / Compliance Schedule:**

Full consideration has been given to the provisions of the Local Government Act 2002 S77 in relation to decision making, in particular:

1. A Local authority must, in the course of the decision-making process,
  - a) Seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
  - b) Assess the options in terms of their advantages and disadvantages; and
  - c) If any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water sites, waahi tapu, valued flora and fauna and other taonga.
2. This section is subject to Section 79 - Compliance with procedures in relation to decisions.

<b>He Take Ōkawa / Compliance Requirement</b>	<b>Aromatawai Kaimahi / Staff Assessment</b>
State the level of significance (high or low) of the issue or proposal as determined by the <a href="#">Council's Significance and Engagement Policy</a>	This is a matter of low significance.
State the relevant Council policies (external or internal), legislation, and/or community outcomes (as stated in the LTP) that relate to this decision.	This report complies with the Local Government Act 2002 Schedule 7 Section 28.
State whether this issue or proposal has a District wide relevance and, if not, the ways in which the appropriate Community Board's views have been sought.	It is the responsibility of each meeting to confirm their minutes therefore the views of another meeting are not relevant.
State the possible implications for Māori and how Māori have been provided with an opportunity to contribute to decision making if this decision is significant and relates to land and/or any body of water.	There are no implications on Māori in confirming minutes from a previous meeting. Any implications on Māori arising from matters included in meeting minutes should be considered as part of the relevant report.
Identify persons likely to be affected by or have an interest in the matter, and how you have given consideration to their views or preferences (for example – youth, the aged and those with disabilities).	This report is asking for the minutes to be confirmed as true and correct record, any interests that affect other people should be considered as part of the individual reports.
State the financial implications and where budgetary provisions have been made to support this decision.	There are no financial implications or the need for budgetary provision arising from this report.
Chief Financial Officer review.	The Chief Financial Officer has not reviewed this report.

**MINUTES OF FAR NORTH DISTRICT COUNCIL  
INFRASTRUCTURE COMMITTEE MEETING  
HELD AT THE COUNCIL CHAMBER, MEMORIAL AVENUE, KAIKOHE  
ON WEDNESDAY, 24 MARCH 2021 AT 9.30 AM**

**PRESENT:** Mayor John Carter (via Microsoft TEAM's), Cr Dave Collard, Cr Rachel Smith, Cr John Vujcich, Kaikohe-Hokianga Community Board Chairperson Mike Edmonds, Te Hiku Community Board Chairperson Adele Gardner

**IN ATTENDANCE:**

**STAFF PRESENT:** Shaun Clarke (Chief Executive Officer), Andy Finch (General Manager Infrastructure and Asset Management), Dean Myburgh (General Manager District Services), William J Taylor, MBE (General Manager Strategic Planning and Policy - Acting), Jamie Dyhrberg (General Manager Corporate Services - Acting)

**1 KARAKIA TIMATANGA – OPENING PRAYER**

Member Smith opened the meeting with a karakia.

**2 APOLOGIES AND DECLARATIONS OF INTEREST**

**RESOLUTION 2021/5**

Moved: Cr Rachel Smith

Seconded: Cr John Vujcich

**That apologies from Cr Felicity Foy, Deputy Mayor Ann Court and Cr Kelly Stratford be received and accepted.**

**CARRIED**

**APPOINTMENT OF CHAIRPERSON**

**RESOLUTION 2021/6**

Moved: Mayor John Carter

Seconded: Cr John Vujcich

**That the Infrastructure Committee agree to Councillor Rachel Smith appointed as Chair for this meeting in the absence of Cr Felicity Foy and Deputy Mayor Court.**

**CARRIED**

**3 DEPUTATION**

Carmen Zielinski spoke to the Committee in regards to Item 5.1 - Kaikohe Waste Water Treatment Plant - Access Safety Assessment and Action Report.

**Attachments tabled at meeting**

- 1 2021-03-24 Tabled Document Photos of Trees provided by Carmen



## 4 CONFIRMATION OF PREVIOUS MINUTES

### 4.1 CONFIRMATION OF PREVIOUS MINUTES

Agenda item 4.1 document number A3110047, pages 14 - 18 refers.

#### **RESOLUTION 2021/7**

Moved: Cr Rachel Smith

Seconded: Te Hiku Community Board Chairperson Adele Gardner

**That the Infrastructure Committee confirm that the minutes of the meeting held 10 February 2021 be confirmed as a true and correct record.**

**CARRIED**

## 5 REPORTS

### 5.1 KAIKOHE WASTE WATER TREATMENT PLANT - ACCESS SAFETY ASSESSMENT AND ACTION REPORT

Agenda item 5.1 document number A3111463, pages 19 - 43 refers.

#### **MOTION**

Moved: Cr John Vujcich

Seconded: Mayor John Carter

That the Infrastructure Committee:

- a) approve the engagement of Northland Forest Managers to undertake the harvesting of the pines trees around the oxidation ponds in Cumber Road.
- b) approve the removal of some hazardous gum and pine trees over the access road, as outlined in Option 4.
- c) approve that the cost of replanting of an estimated \$4,000 is funded from the net revenue under Option 4.

#### **AMENDMENT**

Moved: Kaikohe-Hokianga Community Board Chairperson Mike Edmonds

Seconded: Cr John Vujcich

- d) **approve the payment of \$30.00 to Carmen Zielinski for her costs and \$70 an hour for ongoing time in relation to the refund of \$30.00.**

**CARRIED**

Against: Cr Rachel Smith

#### **RESOLUTION 2021/8**

Moved: Cr John Vujcich

Seconded: Mayor John Carter

**That the Infrastructure Committee:**

- a) **approve the engagement of Northland Forest Managers to undertake the harvesting of the pines trees around the oxidation ponds in Cumber Road, Kaikohe.**

- b) approve the removal of all the hazardous gum and pine trees over the access road, as outlined in Option 4.
- c) approve that the cost of replanting of an estimated \$4,000 is funded from the net revenue under Option 4.
- d) approve the payment of \$30.00 to Carmen Zielinski for her costs and \$70 an hour for ongoing time in relation to the refund of \$30.00.

**CARRIED**

Note: The Infrastructure Committee members are disappointed that this issue was not addressed in a timely manner.

Note: The Infrastructure Committee request that the Committee are provided with a timeline for the work to be undertaken and request a report be provided back to the Committee on the final costs for this project and the income generated.

## **5.2 HIHI WASTEWATER TREATMENT PLANT CAPITAL WORKS BUSINESS CASE**

Agenda item 5.2 document number A3110125, pages 44 - 50 refers.

### **RESOLUTION 2021/9**

Moved: Cr John Vujcich

Seconded: Mayor John Carter

**That the Infrastructure Committee recommend that Council:**

- a) approves the detailed business case preferred Option 3 – Membrane Bio Reactor, to be located on the existing Hihi Wastewater Treatment Plant site, to be advanced to detailed design and community consultation.
- b) notes the potential cost of the preferred option and the impact upon rates.

**CARRIED**

## **6 INFORMATION REPORTS**

### **6.1 INFRASTRUCTURE AND ASSET MANAGEMENT (IAM) MONTHLY BUSINESS REPORT FOR JANUARY 2021**

Agenda item 6.1 document number A3111480, pages 51 - 236 refers.

#### **RESOLUTION 2021/10**

Moved: Cr Rachel Smith

Seconded: Cr John Vujcich

**That the Infrastructure Committee receive the report Infrastructure and Asset Management (IAM) Monthly Business report for January 2021.**

**CARRIED**

## **7 KARAKIA WHAKAMUTUNGA – CLOSING PRAYER**

Member Smith closed the meeting with a karakia.

**8 MEETING CLOSE**

The meeting closed at 10.48 am.

The minutes of this meeting will be confirmed at the Infrastructure Committee meeting to be held on 5 May 2021.

.....  
**CHAIRPERSON**

**MINUTES OF FAR NORTH DISTRICT COUNCIL  
EXTRAORDINARY INFRASTRUCTURE COMMITTEE MEETING  
HELD VIRTUALLY VIA MICROSOFT TEAMS  
ON TUESDAY, 27 APRIL 2021 AT 3.00 PM**

**PRESENT:** Cr Felicity Foy, Mayor John Carter (HWTM), Deputy Mayor Ann Court, Cr Dave Collard, Cr Kelly Stratford, Te Hiku Community Board Chairperson Adele Gardner

**IN ATTENDANCE:**

**STAFF PRESENT:** Andy Finch (General Manager Infrastructure and Asset Management), Dean Myburgh (General Manager District Services), William J Taylor, MBE (General Manager Strategic Planning and Policy - Acting), Jacine Warmington (General Manager - Corporate Services (Acting))

**1 KARAKIA TIMATANGA – OPENING PRAYER**

Cr Kelly Stratford opened the meeting with a karakia.

**2 NGĀ WHAKAPĀHA ME NGĀ PĀNGA MEMA / APOLOGIES AND DECLARATIONS OF INTEREST**

**APOLOGY**

**RESOLUTION 2021/11**

Moved: Cr Felicity Foy  
Seconded: Cr Kelly Stratford

**That the apology received from Cr Rachel Smith be accepted and leave of absence granted.**

**CARRIED**

In Favour: Mayor John Carter, Crs Felicity Foy, Ann Court, Dave Collard, Kelly Stratford and Adele Gardner

Against: Nil

**3 NGĀ TONO KŌRERO / DEPUTATION**

Nil

**4 REPORTS**

**4.1 TOURISM INFRASTRUCTURE FUND APPLICATIONS - APRIL 2021**

Agenda item 4.1 document number A3160902, pages 13 - 51 refers

**RESOLUTION 2021/12**

Moved: Cr Felicity Foy  
Seconded: Deputy Mayor Ann Court

**That the Infrastructure Committee:**

- a) approves the applications for funding included in the report “Tourism Infrastructure Fund Applications April 2021”.
- b) approves the additional capital budget of up to \$643,000 for 2021/2022 to cover the local share required for any successful round five applications along with the cost of project management.
- c) approves the additional operational budget for 2021/2022 in the sum of \$20,000 for the development of applications for future funding rounds.
- d) delegates to the General Manager Infrastructure and Asset Management authorisation to sign the funding agreements and any non-material variations with the Ministry of Business, Innovation and Employment for successful round five applications.

**CARRIED**

In Favour: Mayor John Carter, Crs Felicity Foy, Ann Court, Dave Collard, Kelly Stratford and Adele Gardner

Against: Nil

## **5 KARAKIA WHAKAMUTUNGA – CLOSING PRAYER**

Cr Stratford recognised the passing off Dave Cull (previous President of Local Government New Zealand) and then closed the meeting with a karakia.

## **6 TE KAPINGA HUI / MEETING CLOSE**

The meeting closed at 3.32 pm.

The minutes of this meeting will be confirmed at the Infrastructure Committee meeting held on 5 May 2021.

.....  
**CHAIRPERSON**

## 5 REPORTS

### 5.1 ECONOMIC AND PRACTICABILITY ASSESSMENT FOR DISPOSAL OF TREATED WASTEWATER TO LAND FROM KAIKOHE AND KAITĀIA WASTEWATER TREATMENT PLANTS

**File Number:** A3155862

**Author:** Jaye Michalick, Senior Three Waters Planner

**Authoriser:** Andy Finch, General Manager - Infrastructure and Asset Management

#### TAKE PŪRONGO / PURPOSE OF THE REPORT

To seek a decision from Council, via the Infrastructure Committee, regarding the economic viability of disposing treated wastewater from the Kaikohe and Kaitāia Wastewater Treatment Plants (WWTP) to land.

#### WHAKARĀPOOTO MATUA / EXECUTIVE SUMMARY

- The resource consents that authorise discharge of treated wastewater (to water) from the Kaikohe and Kaitāia Wastewater Treatment Plants (WWTP) both expire on 30 November 2021. Replacement resource consent applications must be lodged with Northland Regional Council (NRC) prior to 31 August 2021.
- The Proposed Regional Plan for Northland sets out that an application for resource consent to discharge municipal wastewater to water will generally not be granted unless a discharge to land has been found, among other things, to not be economically or practicably viable.
- This report seeks a decision from Council regarding the economic viability of disposing treated wastewater to land. This report:
  - Demonstrates, based on a high-level assessment, that disposal of treated wastewater from the Kaikohe and Kaitāia WWTP sites (the subject WWTP sites) to land is considered practicably viable.
  - Discusses the cost estimate of \$17.1M (-35% to +50%) to establish a wastewater to land disposal scheme for the community of Kaikohe, and discusses cost estimates to upgrade the existing WWTPs at Kaikohe (\$7.28M) and Kaitāia (\$5.27M).
  - Combines the total cost estimates for each community (\$24.38M for Kaikohe and \$22.37M) to consider the rating impact of implementing wastewater to land disposal schemes, including upgrading the WWTPs, on the communities of Kaikohe and Kaitāia.
  - Discusses the cost estimates informing this report, including that the level and cost of WWTP upgrades will be influenced by the disposal options progressed (i.e. to land or to water or a mix of both).
  - Discusses rates affordability in the Far North, as analysed by Business and Economic Research Ltd (BERL).
  - Finds that, in support of obtaining replacement discharge resource consents for the subject WWTP sites, disposal of treated wastewater from the Kaikohe and Kaitāia WWTP sites to land is not considered to be economically viable.
  - Requests that Council decides whether the estimated land disposal costs are considered economically viable within the context of Council's purpose under the Local Government Act 2002 to provide for the wellbeing of its communities.
- Disposal of treated wastewater to land is recognised as an option that Far North communities are likely to want considered in more detail. Staff propose that such investigations are undertaken at a district wide level, carried out as part of future Long Term Plan (LTP) process(es).
- The implications resulting from the recommendations contained in this report are also discussed.

**TŪTOHUNGA / RECOMMENDATION**

**That the Infrastructure Committee recommend to Council that:**

- a) the option of disposing treated wastewater from the Kaikohe Wastewater Treatment Plant to land is not pursued as part of the application to replace the resource consent authorising discharge of contaminants from the Kaikohe Wastewater Treatment Plant on the basis that the costs associated with that activity are not economically viable; and,**
- b) the option of disposing treated wastewater from the Kaitāia Wastewater Treatment Plant to land is not pursued as part of the application to replace the resource consent authorising discharge of contaminants from the Kaitāia Wastewater Treatment Plant on the basis that the costs associated with that activity are not economically viable.**

**1) TĀHUHU KŌRERO / BACKGROUND**

Resource consents held by FNDC authorising the discharge of treated wastewater to water from the subject WWTP sites expire on 30 November 2021.

Operative policy D.4.3. of the Proposed Regional Plan for Northland (PRP) sets out that an application to discharge treated wastewater to water will generally not be granted unless a discharge to land has been considered and found to be not economically or practicably viable.

Staff have undertaken desktop assessments to determine the practicable viability of disposing treated wastewater to land for the subject WWTP sites, finding that the activity is considered practicably viable. A high-level estimate of costs to establish a land disposal scheme for the Kaikohe WWTP has also been prepared by external consultants, and the estimated costs are significant at \$17.1M, with an accuracy range of between -35% and +50% (between \$11.12M and \$25.65M).

In accordance with Policy D.4.3 of the PRP, for staff to proceed with an application for resource consent to discharge treated wastewater to water, the application must demonstrate that land disposal has been considered and found to be either practicably or economically unviable. The purpose of this report is to seek a recommendation from the Infrastructure Committee that supports the economic and practicable viability findings discussed in this report. For the purpose of this determination, “economic viability” should be read within the context of Council’s purpose under the Local Government Act 2002; that is: to promote the social, economic, environmental, and cultural well-being of communities in the present and for the future. The recommendation is being sought to support the resource consent applications for the subject WWTPs, due to be lodged in August 2021, and it should be noted that this recommendation does not rule out consideration of wastewater disposal to land options as part of future Long-Term Plans (LTP).

The high-level cost estimates for establishing a land disposal scheme for Kaikohe have been used to estimate the rating impact of establishing disposal to land schemes for the communities of both Kaitāia and Kaikohe, and the BERL report issued in July 2020 titled Rates Affordability in the Far North has been used to frame considerations regarding the affordability of establishing disposal to land schemes for those two communities.

To reduce the margin of error associated with the high-level estimate of costs (between -35% and +50%), disposal to land options will need to be progressed to Preliminary Design stage, resulting in a reduced margin of error between -15% and +20%. An initial price indication of approximately \$150,000 per WWTP has been obtained by Beca, to progress disposal to land investigations to preliminary design stage. A decision on whether to progress with that work will be dependent on Council’s decision as to the economic viability of the high-level costs presented in this report.

**2) MATAPAKI ME NGĀ KŌWHIRINGA / DISCUSSION AND OPTIONS**

- a) Assessment of practicable viability to dispose treated wastewater to land from the subject WWTP sites**

Desktop assessments of land within a 10km radius of each of the subject WWTP sites identified numerous potential land disposal sites for Kaitāia and Kaikohe. These sites were then scored and ranked using multi criteria analysis (MCA) to arrive at a shortlist of potentially suitable land disposal sites for each WWTP. Based on these findings, land disposal is considered practicable for Kaikohe and Kaitāia. The assessments were peer-reviewed by Beca engineering staff. The details of the investigation work are provided in the reports titled *Kaikohe Wastewater Treatment Plant Land Disposal Options Assessment* (December 2020), and *Kaitāia Wastewater Treatment Plant Land Disposal Options Assessment* (March 2021), attached as Attachments 1 and 2.

The site within 10km of the Kaikohe WWTP that achieved the highest score is owned by Far North Holdings Ltd (FNHL), intended for development with water storage and an industrial park, therefore it is considered unlikely that this site would be made available to FNDC for the purpose of land disposal. The desktop assessments were conducted to rank numerous potential sites, and therefore if a high-ranking site is found to be unsuitable for any reason, the next highest ranked site can be investigated.

**b) High-level cost estimate and rating impact to establish land disposal schemes for the communities of Kaikohe and Kaitāia**

The high-level cost estimate to establish disposal of treated wastewater to land for the community of Kaikohe is approximately \$17.1M, with an accuracy range of between -35% and +50% (between \$11.12M and \$25.65M). The estimate is indicative only, based off a series of high-level assumptions and no specific land sites have been identified for this economic analysis. A copy of the cost estimate is attached to this report as Attachment 3.

Using the high-level cost estimate for Kaikohe, staff have estimated the rating impact of establishing disposal to land schemes for each of the subject WWTP sites. Three separate rating impact options have been prepared for each WWTP, using the cost estimate value, and the upper and lower margin of error cost values. A copy of each rating impact assessment for the subject WWTP sites is attached to this report as Attachments 4 and 5. Given the high-level nature of the cost estimate prepared for Kaikohe (which is not site-specific), and the relative similarities between the subject WWTP sites, staff consider that there are enough similarities between the sites to use the cost estimate established for land disposal at Kaikohe to also estimate the rating impact of establishing land disposal for the community of Kaitāia.

Consultants Harrison Grierson Ltd (H&G) were engaged in 2020 to assess upgrade options for each WWTP, to support the replacement resource consent applications that are anticipated to result in resource consents that authorise discharge of wastewater to water, and which include conditions requiring higher treated effluent quality than currently being discharged from both WWTP. H&G developed a short list of upgrade options, which were workshopped with staff via an MCA process to arrive at a preferred upgrade option for each WWTP. High level costs were also developed for each preferred WWTP upgrade option (Kaikohe total upgrade cost of \$7.28M and Kaitāia total upgrade cost of \$5.27M). Details for the upgrade options assessments, and costs, for the Kaitāia and Kaikohe WWTP sites are set out in the reports titled *Kaikohe WWTP Options Assessment* (November 2020), and *Kaitāia WWTP Options Assessment* (November 2020), attached to this report as Attachments 6 and 7. The preferred options have been incorporated into the 2021-2031 LTP, but have not yet been consulted on as part of the resource consent application process, therefore the preferred option for each site is currently still considered a draft option.

To enable establishment of land disposal schemes for the Kaitāia and Kaikohe WWTP sites, upgrades to each WWTP are also required, however, the extent to which upgrades are required is dependent on the design of a land disposal scheme, and there is the potential to require only minimal WWTP upgrades if large areas of land can be obtained to result in discharge to water only being required for short time periods, or not at all (i.e. 100% land disposal). For the purpose of this report, staff have assumed that land disposal will not be achieved 100% of the time and therefore assumed the WWTP sites will need to be upgraded to achieve effluent discharge quality that is consistent with a discharge to water consent. However, if further investigations into land disposal are carried out, the WWTP upgrade costs could be significantly



lower (perhaps as much as 50% in the case of Kaikohe) if we can achieve disposal to land 100% of the time. The WWTP upgrade component of the rating impact may therefore be an overestimate.

Table 1 sets out the estimated total rating impact of upgrading the existing Kaikohe WWTP using the H&G preferred option and establishing a disposal to land scheme for the community of Kaikohe (using the estimated value of \$17.1M). Table 2 sets out the estimated total rating impact for the same activities in the Kaitiāia community. Expenditure has been assumed to occur in financial years 3 (WWTP upgrade) and 4 (establish land disposal schemes), with rating impacts commencing in the following years (4 and 5). Copies of the rating impact assessment to upgrade each WWTP site are attached to this report as **Attachments 8 and 9**.

**Table 1: Total estimated targeted rating impact of WWTP disposal to land activities in Kaikohe:**

OPTION	FY24/25 (Y4)	FY25/26 (Y5)	FY26/27 (Y6)	FY27/28 (Y7)	FY28/29 (Y8)	FY29/30 (Y9)	FY30/31 (Y10)
Land Disposal	-	\$404.39	\$397.80	\$391.20	\$384.61	\$378.02	\$371.43
WWTP Upgrade	\$256.00	\$253.35	\$250.71	\$248.06	\$245.42	\$242.77	\$240.13
Total	\$256.00	\$657.74	\$648.51	\$639.26	\$630.03	\$620.79	\$611.56

**Table 2: Total estimated targeted rating impact of WWTP disposal to land activities in Kaitiāia:**

OPTION	FY24/25 (Y4)	FY25/26 (Y5)	FY26/27 (Y6)	FY27/28 (Y7)	FY28/29 (Y8)	FY29/30 (Y9)	FY30/31 (Y10)
Land Disposal	-	\$281.69	\$277.10	\$272.51	\$267.92	\$263.33	\$258.74
WWTP Upgrade	\$103.50	\$102.33	\$101.16	\$99.99	\$98.82	\$97.65	\$96.48
Total	\$103.50	\$384.02	\$378.26	\$372.50	\$366.74	\$360.98	\$355.22

Should the option of establishing disposal of treated wastewater to land schemes be pursued for either community, the total value of the estimated rating impact of WWTP disposal to land activities would be added to the current adopted connected rates for the relevant community. Table 3 sets out the current adopted connect rates for FY20/21 in Kaitiāia and Kaikohe.

**Table 3: Adopted WWTP Connected Rates for Kaitiāia and Kaikohe FY 2020/2021**

COMMUNITY	WWTP CONNECTED RATE FY 20/21
KAIKOHE	\$148.69
KAITĀIA	\$189.43

Staff acknowledge that Council is giving consideration to the options of a district wide rating scheme for water and wastewater as part of the 2021-2031 Long Term Plan. This decision has not yet been taken, but to enable Council to understand the rating impact under a possible district wide rating

scheme, the district wide rating impact of upgrading each WWTP and establishing land disposal for the communities of Kaitāia and Kaikohe has also been calculated, using the same high level costs used for calculating the targeted rating impacts set out above. The estimated district wide rating impacts are set out in Tables 4 and 5. Copies of the district wide rating impact assessment for each subject WWTP site are attached to this report as **Attachment 10 and 11**.

**Table 4: Total estimated district wide rating impact of WWTP disposal to land activities in Kaikohe:**

OPTION	FY24/25 (Y4)	FY25/26 (Y5)	FY26/27 (Y6)	FY27/28 (Y7)	FY28/29 (Y8)	FY29/30 (Y9)	FY30/31 (Y10)
Land Disposal	-	\$70.89	\$69.74	\$68.58	\$67.42	\$66.27	\$65.11
WWTP Upgrade	\$44.88	\$44.41	\$43.95	\$43.94	\$43.02	\$42.56	\$42.10
Total	\$44.88	\$115.30	\$113.69	\$112.52	\$110.44	\$108.83	\$107.21

**Table 5: Total estimated district wide rating impact of WWTP disposal to land activities in Kaitāia:**

OPTION	FY24/25 (Y4)	FY25/26 (Y5)	FY26/27 (Y6)	FY27/28 (Y7)	FY28/29 (Y8)	FY29/30 (Y9)	FY30/31 (Y10)
Land Disposal	-	\$70.89	\$69.74	\$68.58	\$67.42	\$66.27	\$65.11
WWTP Upgrade	\$26.05	\$25.75	\$25.46	\$25.16	\$24.87	\$24.57	\$24.28
Total	\$26.05	96.64	\$95.20	\$93.74	\$92.29	\$90.84	\$89.39

### c) Consideration of rates affordability

The BERL report issued in July 2020 titled *Rates Affordability in the Far North* (the BERL Report), establishes that affordability, in the context of rates has two aspects:

- i) the cost relative to income (and wealth);
- ii) the ability of ratepayers to earn greater income in the future from the spending of rates, e.g. investment in infrastructure. It also sets out an approximate benchmark for affordability, whereby affordability concerns will arise where rates exceed 5% of gross household income.

The BERL report assesses rates affordability at three levels: district wide level, ward level (Te Hiku, Bay of Islands and Kaikohe-Hokianga), and at several specified smaller areas including Kaitāia and Kaikohe. Within the BERL report, rates affordability is assessed by

- i. establishing an average lower quartile, average median, and average upper quartile total rates payable value at district level, ward level, and smaller area level (the total includes both NRC and FNDC rates)
- ii. determining an average gross household income for eight typical household types also defined at district, ward, and smaller area level, and 3) calculating the cost of total rates as a percentage of the gross income for each household type for the lower quartile,

median and upper quartile average total rates values. The results of the affordability assessments are depicted in Tables 16 and 17 (Kaikohe), and Tables 20 and 21 (Kaitāia) of the BERL report. In both communities, the current estimated total cost of rates exceeds 5% in 6 out of 8 typical households. Taking into account the findings of the BERL report, it is assumed that 6 out of 8 typical households currently experience the issue of rates affordability in Kaikohe and Kaitāia. A copy of the BERL report is attached to this report as **Attachment 12**.

The BERL report establishes that rates in Kaikohe and Kaitāia are already predominantly unaffordable. Taking this into account, staff do not consider land disposal to be affordable, and therefore currently not economically viable.

#### **d) Implications**

##### **Option 1 (preferred option) - Determining that disposal of treated wastewater from the Kaikohe and Kaitāia WWTP sites to land is not pursued as part of the replacement resource consent applications**

Should Council decide that disposal of treated wastewater from the Kaikohe and Kaitāia WWTP sites to land is not economically viable in the context of the required replacement resource consent applications, then this decision will be used to demonstrate to NRC that (as per the requirement of Policy D.4.3.2) the economic viability of land disposal has been sufficiently considered, and that a discharge of treated wastewater to land has been found to be practicably viable, but not economically viable. It is anticipated that this will result in a resource consent authorising discharge to water being approved for the subject WWTP sites, subject to conditions requiring a substantive upgrade to the treatment plants.

This outcome does not prevent FNDC from continuing to investigate the option of wastewater disposal to land and a proposed method to undertake such investigations is outlined below.

##### **Option 2 - Deferring a decision on the economic viability of land disposal from the Kaitāia and Kaikohe wastewater treatment plants.**

Should Council decide to defer a decision on the economic viability of land disposal, staff will still be required to lodge applications with NRC for replacement resource consents authorising discharge of treated wastewater to water prior to 31 August 2021. These applications would include the assessments carried out to date on disposal to land feasibility and costs but will be absent a council decision in respect of the economic viability of the land disposal. The consequence of not including a council decision on the matter is that staff will be required to make a determination on the matter and present this in the application. A determination by staff may not carry sufficient weight to be accepted either by the community or NRC.

##### **Option 3 - Deciding that discharge to land is economically viable**

A decision that disposal to land is economically viable will require a staged consenting process. Staff will be required to lodge a consent application for discharge to water to cover the ongoing discharge whilst the site selection, land purchase, consenting, design, delivery and LTP requirements are covered. It can be expected that a short-term consent would not be inconsistent with Policy D.4.3 because it can be demonstrated that it is not practicably viable to deliver a land disposal scheme within the time constraints associated with the above. An upgrade to the treatment plant is likely to be required to meet the discharge standards set out within the PRP despite the temporary nature of the resource consent.

#### **e) Development of a long-term district wide strategic approach for investigating treated wastewater disposal to land options**

While this report recommends that wastewater disposal to land is considered not economically viable in the context of the resource consent applications that must be submitted to NRC later this year, staff propose that the option of disposing treated wastewater to land should be methodically investigated at a district wide level. Such investigations are recommended to consider the following:

disposal to land methods; potentially suitable sites for land disposal (including where possible combining flows, such as from Kaitāia and Ahipara, to a single site); analysis of potential end-use options for the disposal sites (such as cut and carry bales, or as disposal sites for end-use sludge generated by WWTPs across the district and processed to an acceptable quality prior to disposal); costs associated with establishing land disposal schemes (based on preliminary design level information); potential revenue streams from end-use scenarios; and prioritisation across the Far North's WWTP sites to determine the order in which WWTP site(s) are investigated for land disposal viability.

#### **f) Relevant Legislation and/or Policies**

Section 15 of the Resource Management Act 1991 (RMA) establishes that discharge of contaminants into the environment must be either expressly allowed in a regulation or regional plan or approved by a resource consent. FNDC must hold resource consent for discharge of treated wastewater (to land or water) for each WWTP.

Staff are currently preparing resource consent applications to renew discharge of treated wastewater from the Kaikohe and Kaitāia WWTP's. In accordance with s124 of the RMA, these applications will need to be lodged no later than 31 August 2021, in order for FNDC to be allowed by NRC to continue to operate under the current discharge consents, until a decision is made on each renewal application.

Policy D.4.3.2) of the Proposed Regional Plan for Northland (which is not subject to appeals and is therefore operative), sets out that an application for resource consent to discharge municipal wastewater to water will generally not be granted unless a discharge to land has been found to not be economically or practicably viable.

#### **g) Significance and Engagement**

Establishing a wastewater disposal to land scheme for a community is identified as a significant decision under FNDC's current and proposed Significance and Engagement Policies (2018 and 2021). Specific consultation for any proposed land disposal scheme proposal is recommended via future LTP engagement processes.

#### **h) Implications for Māori**

A decision to not pursue the option of disposing treated wastewater from the Kaikohe and Kaitāia WWTP sites to land will have implications for Māori. Specifically, the concept of discharging treated wastewater to water is generally considered to be culturally offensive and is typically opposed by tangāta whenua. Staff are commencing engagement with tangata whenua and it is expected that the effects (on tangata whenua) will be further articulated by way of a CIA or similar assessment approach.

It is also anticipated that mana whenua engagement will occur where appropriate as part of any future land disposal scheme investigations, however the level of engagement would need to be determined at such time as suitable sites are being investigated in greater detail.

#### **Take Tūtohunga / Reason for the recommendation**

Staff acknowledged that disposal of treated wastewater to land may be a long-term goal for Council because it generally results in better environmental and cultural outcomes, and with the potential for some cost recovery through the establishment of appropriate end-use practices. However, costs and rating impacts associated with establishing disposal to land schemes are significant. A long-term strategic approach to delivering land disposal at a district wide level is considered necessary to attempt to achieve the objective of land disposal at the lowest possible cost to the district. Implementing disposal to land schemes across a district in an ad-hoc manner, which is dictated not by a district wide strategy, but instead by the priority in which resource consents expire, has the potential for lost opportunities that would otherwise be expected to result from a coordinated and methodical district wide consideration of the activity.

### 3) PĀNGA PŪTEA ME NGĀ WĀHANGA TAHUA / FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

Currently there are no funds allocated for the establishment of land disposal schemes for any of FNDCs WWTP sites.

Unallocated budget of approximately \$330,000 is necessary to fund Preliminary Design stage wastewater disposal to land for the communities of Kaitāia and Kaikohe. Funds and resources have not been allocated for the development of a district wide disposal to land strategy.

#### ĀPITIHINGA / ATTACHMENTS

1. **Kaikohe Waste Water Treatment Plant Land Disposal Report - A3060982 (under separate cover)** 
2. **Kaitāia Waste Water Treatment Plant Land Disposal Report - A3134756 (under separate cover)** 
3. **FNDC Kaikohe Waste Water Treatment Plant Land Disposal Cost Estimate - A3060290**  
 
4. **Kaikohe Disposal to Land Rating Impact - A3134831**  
5. **Kaitāia Disposal to Land Rating Impact - A3134830**  
6. **HG Final Kaikohe Waste Water Treatment Plant Upgrade Options Report - A2975696 (under separate cover)** 
7. **HG Final Kaitāia Waste Water Treatment Plant Upgrade Options Report - A2975695 (under separate cover)** 
8. **Kaikohe Waste Water Treatment Plant Upgrade Rating Impact - A3134837**  
9. **Kaitāia Waste Water Treatment Plant Upgrade Rating Impact - A3134839**  
10. **Kaikohe Disposal to Land District Wide Rating Impact - A3134836**  
11. **Kaitāia Disposal to Land District Wide Rating Impact - A3134838**  
12. **Far North Rates Affordability Report - A3002966 (under separate cover)** 

**Hōtaka Take Ōkawa / Compliance Schedule:**

Full consideration has been given to the provisions of the Local Government Act 2002 S77 in relation to decision making, in particular:

1. A Local authority must, in the course of the decision-making process,
  - a) Seek to identify all reasonably practicable options for the achievement of the objective of a decision; and
  - b) Assess the options in terms of their advantages and disadvantages; and
  - c) If any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water sites, waahi tapu, valued flora and fauna and other taonga.
2. This section is subject to Section 79 - Compliance with procedures in relation to decisions.

<b>He Take Ōkawa / Compliance Requirement</b>	<b>Aromatawai Kaimahi / Staff Assessment</b>
State the level of significance (high or low) of the issue or proposal as determined by the <a href="#">Council's Significance and Engagement Policy</a>	Deciding that it is economically viable to establish wastewater disposal to land schemes for the communities of Kaitāia and Kaikohe has a high level of significance, which meets a number of criteria (for high significance) set out in the policy.
State the relevant Council policies (external or internal), legislation, and/or community outcomes (as stated in the LTP) that relate to this decision.	The Resource Management Act requires FNDC to hold resource consent to discharge contaminants into the environment. Replacement resource consents are being sought which include proposed upgrades to the WWTP to achieve a higher quality effluent discharge. This approach is viewed as more affordable than establishing disposal to land schemes for the subject communities and is considered consistent with the community outcome of: <i>Prosperous communities supported by a sustainable economy.</i>
State whether this issue or proposal has a District wide relevance and, if not, the ways in which the appropriate Community Board's views have been sought.	The issue of establishing disposal to land schemes is considered to be a district wide issue, which has been focused via this report on the communities of Kaitāia and Kaikohe, as a result of the need to replace discharge resource consents for these communities.
State the possible implications for Māori and how Māori have been provided with an opportunity to contribute to decision making if this decision is significant and relates to land and/or any body of water.	A decision that land disposal is not economically viable will have implications for Māori, being the continued discharge of treated effluent to water. Consultation with tangata whenua regarding this matter is currently being commenced, to enable tangata whenua to contribute to the resource consent application decision making process.
Identify persons likely to be affected by or have an interest in the matter, and how you have given consideration to their views or preferences (for example – youth, the aged and those with disabilities).	All rate payers that are connected to, or have the ability to connect to, a public wastewater scheme will be affected by this matter. Consideration of the economic impact of establishing land disposal schemes has been considered via the rating impact of the activity.

State the financial implications and where budgetary provisions have been made to support this decision.	A decision that finds the activity (of land disposal) to be economically viable will have significant financial implications, which may in turn require decisions by Council to transfer funding from other areas within the organisation, or otherwise fund establishment of land disposal schemes. No budgetary provisions have yet been made either to establish land disposal schemes, or to undertake further investigation to preliminary design stage for either community.
Chief Financial Officer review.	The Chief Financial Officer has reviewed this report.



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Far North District Council  
PO Box 752  
Kaikohe 0440  
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30 October 2020

**Attention: Mandy Wilson**

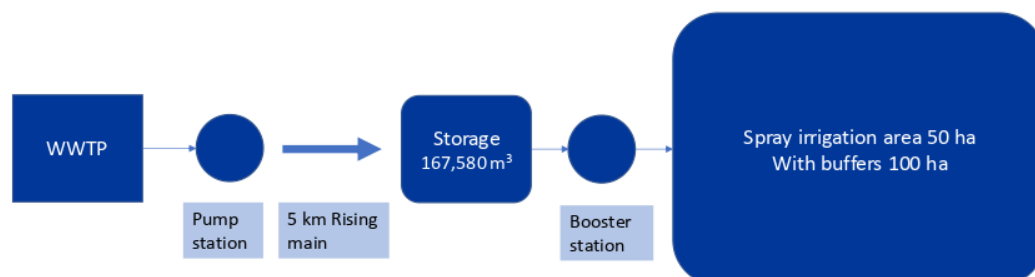
Dear Mandy

**Kaikohe WWTP Cost Estimate**

As per our peer review proposal dated 27 August 2020, a cost estimate has been prepared for a high-level economic analysis of the expected land discharge costs for the Kaikohe Wastewater Treatment Plant (WWTP).

The cost estimate has been prepared based on the assumed key elements in the schematic in Figure 1, and include allowances for preliminary and general contractor costs, and fees and investigations, to give a whole-project cost estimate. This cost estimate is indicative only based off a series of high-level assumptions. No specific land sites have been identified and further concept design and costing work will be required to generate a cost estimate for specific sites and associated site-specific constraints.

The costs for options for the WWTP upgrade have been provided by others, and have not been included in this estimate.



**Figure 1 Schematic of high-level land discharge design used for cost estimation**

**Table 1 Cost estimate for land discharge scheme**

Item	Cost (NZD)
Conveyance to irrigation site	\$3.9M
Irrigation scheme and storage	\$4.7M
Fees and investigations	\$2.3M
General	\$4.1M



Item	Cost (NZD)
Land Purchase	\$2.0M
<b>Total Estimated Cost (-35% to +50%) excluding GST</b>	<b>\$17.1M</b>

#### Estimation Notes and Assumptions

- This estimate is an order of magnitude cost with an expected accuracy range of between -35% to +50%
- 50 ha land area for irrigation is assumed to be required (based on indicative work undertaken by FNDC) plus 100% for storage, buffers and non-irrigable areas or the site and harvest stand down periods. This buffer area may be reduced following the identification of a specific site.
- Spray irrigation proposed – nozzle size allows for larger particulates, for example algae from ponds
- Three months storage of 167,580 m<sup>3</sup> is assumed (supplied by FNDC, appears to be based on 2020 average flow)
- Geotechnical investigations included for rising main and irrigation site
- Irrigation site is assumed to require 5 km of pipeline from the WWTP to the irrigation site
- Pump and rising main sizing has been based on schemes for WWTPs of a similar size

#### Exclusions

- Legal fees
- Consents
- Ground improvement works
- Goods and Services Tax
- Contingency

#### Limitations

It should be noted that the cost estimates provided as part of the Services are not a statement of absolute cost, rather they will have an accuracy range commensurate with various factors such as the extent of relevant information provided, the certainty of data and the level of detail available at the time of preparation.

The high level cost estimates presented in this letter are typically developed based on extrapolation of recent similar project pricing, historical quotes for some equipment items, industry unit rates and Beca's general experience. The estimates are based on incomplete design and other information and are not warranted or guaranteed by Beca. The accuracy of these estimates is not expected to be better than approximately -35% to +50% for the scope of work described in this report. Further design should be undertaken if a more reliable estimate is required.

## Total Scheme Cost

A review of the short-listed options provided by Harrison Grierson in their Options Report (draft, October 2020) found that options 3, 4A and 4B are the most likely to meet consent conditions for discharge to stream when the storage pond for the irrigation is fully utilised, and irrigation is not possible. The times when a discharge to stream is potentially required is when pond-based systems are at their lowest performance levels, generally being in the wet and cold months when treatment processes produce the lowest quality treated effluent of the year, and ammonia (currently the failing determinand) is most at risk. This is based on experience with pond treatment systems in other regions using the technologies in options 1 and 2 which are not meeting compliance with their resource consents.

Potential total costs for a WWTP upgrade and land discharge scheme are presented in Table 2 below.

**Table 2 Total scheme capital cost using Harrison Grierson WWTP option costs<sup>#</sup>**

Option	HG WWTP Option cost	Total scheme cost <sup>*</sup>
3. IDAL	\$6.5M-\$8.9M	\$17.6M-\$34.6M
4A. side stream BNR	\$15.0M-\$20.6M	\$26.1M-\$46.3M
4B. BNR	\$17.5M-\$24.0M	\$28.6M-\$49.7M

<sup>#</sup>Note: Beca accepts no responsibility for the costs provided by others

<sup>\*</sup>Total scheme costs have been calculated to include the high/low range for the land discharge costs

## References

Kaikohe WWTP Options Assessment, Harrison Grierson, Draft October 2020

FNDC Kaikohe WW Peer Review 01.10.20.pdf

Yours sincerely



**Nicola Marvin**

Senior Environmental Scientist

on behalf of

**Beca Limited**

Phone Number:

Email: nicola.marvin@beca.com

Kaikohe WASTEWATER: Kaikohe WWTP Disposal to Land high level cost estimate (based on Beca estimate dated 30 Oct 2020)												
AVERAGE CAPITAL Rate - per connection	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10		
Option Estimate	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Option Estimate 39%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Option Estimate 50%	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

OPERATING Rate per connection	Rate based on opex spend on Options
Option Estimate	\$
Option Estimate 39%	\$
Option Estimate 50%	\$

Current connections	CAPITAL	OPERATING
Connections	1,695	12764
Availability	74	
Pans	781	4141
Weighted Numbers	2238	15249

Interest Rates									
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
0.022	0.018	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

				Cost Estimates							Depreciation										Debt Repayment										Interest									
Asset Detail	Total Spend	Average Depreciable Life	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
Option Estimate																																								
Conveyance from WWTP to	3,680,625	75								0	0	0	0	40,075	40,075	40,075	40,075	40,075	40,075	0	0	0	0	184,031	184,031	184,031	184,031	184,031	184,031	0	0	0	0	55,209	52,449	49,688	46,928	44,168	41,407	
Conveyance from WWTP to	920,156	35								0	0	0	0	26,290	26,290	26,290	26,290	26,290	26,290	0	0	0	0	46,008	46,008	46,008	46,008	46,008	46,008	0	0	0	0	13,802	13,112	12,422	11,732	11,042	10,352	
Irrigation scheme and reservoir	2,772,266	15								0	0	0	0	184,818	184,818	184,818	184,818	184,818	184,818	0	0	0	0	138,613	138,613	138,613	138,613	138,613	138,613	0	0	0	0	41,584	39,505	37,426	35,346	33,267	31,188	
Irrigation scheme and reservoir	2,772,266	50								0	0	0	0	55,445	55,445	55,445	55,445	55,445	55,445	0	0	0	0	138,613	138,613	138,613	138,613	138,613	138,613	0	0	0	0	41,584	39,505	37,426	35,346	33,267	31,188	
General 50% Electrical and	2,477,344	15								0	0	0	0	165,156	165,156	165,156	165,156	165,156	165,156	0	0	0	0	123,867	123,867	123,867	123,867	123,867	123,867	0	0	0	0	37,160	35,302	33,444	31,586	29,728	27,870	
General 50% Tank / Civil	2,477,344	50								0	0	0	0	49,547	49,547	49,547	49,547	49,547	49,547	0	0	0	0	123,867	123,867	123,867	123,867	123,867	123,867	0	0	0	0	37,160	35,302	33,444	31,586	29,728	27,870	
Land Purchase - Non Depreciating	2,000,000	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	30,000	28,500	27,000	25,500	24,000	22,500	
Opex	0	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	17,100,000		0	0	0	17,100,000	0	0	0	0	0	0	0	530,331	530,331	530,331	530,331	530,331	530,331	0	0	0	0	855,000	855,000	855,000	855,000	855,000	855,000	0	0	0	0	256,500	243,675	230,850	218,025	205,200	192,375	
Option Estimate 39%																																								
Conveyance from WWTP to	2,392,406	75								0	0	0	0	31,899	31,899	31,899	31,899	31,899	31,899	0	0	0	0	119,620	119,620	119,620	119,620	119,620	119,620	0	0	0	0	35,886	34,092	32,297	30,503	28,709	26,915	
Conveyance from WWTP to	598,102	35								0	0	0	0	17,089	17,089	17,089	17,089	17,089	17,089	0	0	0	0	29,905	29,905	29,905	29,905	29,905	29,905	0	0	0	0	8,972	8,523	8,074	7,626	7,177	6,729	
Irrigation scheme and reservoir	1,801,973	15								0	0	0	0	120,132	120,132	120,132	120,132	120,132	120,132	0	0	0	0	90,099	90,099	90,099	90,099	90,099	90,099	0	0	0	0	27,030	25,678	24,327	22,975	21,624	20,272	
Irrigation scheme and reservoir	1,801,973	50								0	0	0	0	36,039	36,039	36,039	36,039	36,039	36,039	0	0	0	0	90,099	90,099	90,099	90,099	90,099	90,099	0	0	0	0	27,030	25,678	24,327	22,975	21,624	20,272	
General 50% Electrical and	1,630,273	15								0	0	0	0	107,352	107,352	107,352	107,352	107,352	107,352	0	0	0	0	80,514	80,514	80,514	80,514	80,514	80,514	0	0	0	0	24,154	22,946	21,739	20,531	19,323	18,116	
General 50% Tank / Civil	1,630,273	50								0	0	0	0	32,205	32,205	32,205	32,205	32,205	32,205	0	0	0	0	80,514	80,514	80,514	80,514	80,514	80,514	0	0	0	0	24,154	22,946	21,739	20,531	19,323	18,116	
Land Purchase - Non Depreciating	1,300,000	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	65,000	65,000	65,000	65,000	65,000	65,000	0	0	0	0	19,500	18,525	17,550	16,575	15,600	14,625	
Opex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11,115,000		0	0	0	11,115,000	0	0	0	0	0	0	0	344,715	344,715	344,715	344,715	344,715	344,715	0	0	0	0	555,750	555,750	555,750	555,750	555,750	555,750	0	0	0	0	166,725	158,389	150,053	141,716	133,380	125,044	
Option Estimate 50%																																								
Conveyance from WWTP to	5,520,938	75								0	0	0	0	73,613	73,613	73,613	73,613	73,613	73,613	0	0	0	0	276,047	276,047	276,047	276,047	276,047	276,047	0	0	0	0	82,814	78,673	74,533	70,392	66,251	62,111	
Conveyance from WWTP to	1,380,234	35								0	0	0	0	39,435	39,435	39,435	39,435	39,435	39,435	0	0	0	0	69,012	69,012	69,012	69,012	69,012	69,012	0	0	0	0	20,704	19,668	18,633	17,598	16,563	15,528	
Irrigation scheme and reservoir	4,158,398	15								0	0	0	0	277,227	277,227	277,227	277,227	277,227	277,227	0	0	0	0	207,920	207,920	207,920	207,920	207,920	207,920	0	0	0	0	62,376	59,257	56,138	53,020	49,901	46,782	
Irrigation scheme and reservoir	4,158,398	50								0	0	0	0	81,168	81,168	81,168	81,168	81,168	81,168	0	0	0	0	207,920	207,920	207,920	207,920	207,920	207,920	0	0	0	0	62,376	59,257	56,138	53,020	49,901	46,782	
General 50% Electrical and	3,736,016	15								0	0	0	0	247,734	247,734	247,734	247,734	247,734	247,734	0	0	0	0	185,801	185,801	185,801	185,801	185,801	185,801	0	0	0	0	55,740	52,953	50,166	47,379	44,592	41,805	
General 50% Tank / Civil	3,736,016	50								0	0	0	0	74,320	74,320	74,320	74,320	74,320	74,320	0	0	0	0	185,801	185,801	185,801	185,801	185,801	185,801	0	0	0	0	55,740	52,953	50,166	47,379	44,592	41,805	
Land Purchase - Non Depreciating	3,000,000	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	150,000	150,000	150,000	150,000	150,000	150,000	0	0	0	0	45,000	42,750	40,500	38,250	36,000	33,750	
Opex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	25,650,000		0	0	0	25,650,000	0	0	0	0	0	0	0	795,497	795,497	795,497	795,497	795,497	795,497	0	0	0	0	1,282,500	1,282,500	1,282,500	1,282,500	1,282,500	1,282,500	0	0	0	0	384,750	365,513	346,275	327,038	307,800	288,563	

Kaitiāia WASTEWATER: Kaitiāia WWTP Disposal to Land high level cost estimate (based on Best estimate dated 30 Oct 2020)

AVERAGE CAPITAL Rate - per connection											
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
Option - Estimate	\$ -	\$ -	\$ -	\$ -	\$ 281.89	\$ 277.80	\$ 272.51	\$ 267.82	\$ 263.31	\$ 258.74	
Option - Estimate 33%	\$ -	\$ -	\$ -	\$ -	\$ 183.50	\$ 180.12	\$ 177.13	\$ 174.15	\$ 171.16	\$ 168.18	
Option - Estimate 50%	\$ -	\$ -	\$ -	\$ -	\$ 422.54	\$ 415.65	\$ 408.77	\$ 401.88	\$ 394.99	\$ 388.10	

OPERATING Rate per connection	Rate based on open spend on Options
Option - Estimate	\$ -
Option - Estimate 33%	\$ -
Option - Estimate 50%	

Current connections	CAPITAL	OPERATING
Connections	2,605	12764
Availability	96	
Pans	852	4141
Weighted Numbers	3212	15249

Interest Rates									
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
0.022	0.018	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

			Cost Estimates							Depreciation										Debt Repayment										Interest										
Asset Detail	Total Spend	Average Depreciable Life	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
Option - Estimate																																								
Conveyance from WWTP to	3,680,625	75				3,680,625				0	0	0	0	40,075	40,075	40,075	40,075	40,075	40,075	0	0	0	0	184,031	184,031	184,031	184,031	184,031	184,031	0	0	0	0	55,209	52,449	49,688	46,928	44,168	41,407	
Conveyance from WWTP to	920,156	35				920,156				0	0	0	0	26,290	26,290	26,290	26,290	26,290	26,290	0	0	0	0	46,008	46,008	46,008	46,008	46,008	46,008	0	0	0	0	13,802	13,112	12,422	11,732	11,042	10,352	
Irrigation scheme and reservoir	2,772,266	15				2,772,266				0	0	0	0	184,818	184,818	184,818	184,818	184,818	184,818	0	0	0	0	138,613	138,613	138,613	138,613	138,613	138,613	0	0	0	0	41,584	39,505	37,426	35,346	33,267	31,188	
Irrigation scheme and reservoir	2,772,266	50				2,772,266				0	0	0	0	55,445	55,445	55,445	55,445	55,445	55,445	0	0	0	0	138,613	138,613	138,613	138,613	138,613	138,613	0	0	0	0	41,584	39,505	37,426	35,346	33,267	31,188	
General 50% Electrical and	2,477,344	15				2,477,344				0	0	0	0	165,156	165,156	165,156	165,156	165,156	165,156	0	0	0	0	123,867	123,867	123,867	123,867	123,867	123,867	0	0	0	0	37,160	35,302	33,444	31,586	29,728	27,870	
General 50% Tank / Civil	2,477,344	50				2,477,344				0	0	0	0	49,547	49,547	49,547	49,547	49,547	49,547	0	0	0	0	123,867	123,867	123,867	123,867	123,867	123,867	0	0	0	0	37,160	35,302	33,444	31,586	29,728	27,870	
Land Purchase - Non Depreciating	2,000,000	0				2,000,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	30,000	28,500	27,000	25,500	24,000	22,500	
Opex	0	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	17,100,000		0	0	0	17,100,000	0	0	0	0	0	0	0	530,331	530,331	530,331	530,331	530,331	530,331	0	0	0	0	855,000	855,000	855,000	855,000	855,000	855,000	0	0	0	0	256,500	241,675	230,850	218,025	205,200	192,375	
Option - Estimate 33%																																								
Conveyance from WWTP to	2,392,406	75				2,392,406				0	0	0	0	31,899	31,899	31,899	31,899	31,899	31,899	0	0	0	0	119,620	119,620	119,620	119,620	119,620	119,620	0	0	0	0	35,886	34,092	32,297	30,503	28,709	26,915	
Conveyance from WWTP to	598,102	35				598,102				0	0	0	0	17,089	17,089	17,089	17,089	17,089	17,089	0	0	0	0	29,905	29,905	29,905	29,905	29,905	29,905	0	0	0	0	8,972	8,523	8,074	7,626	7,177	6,729	
Irrigation scheme and reservoir	1,801,973	15				1,801,973				0	0	0	0	120,132	120,132	120,132	120,132	120,132	120,132	0	0	0	0	90,099	90,099	90,099	90,099	90,099	90,099	0	0	0	0	27,030	25,678	24,327	22,975	21,624	20,272	
Irrigation scheme and reservoir	1,801,973	50				1,801,973				0	0	0	0	36,039	36,039	36,039	36,039	36,039	36,039	0	0	0	0	90,099	90,099	90,099	90,099	90,099	90,099	0	0	0	0	27,030	25,678	24,327	22,975	21,624	20,272	
General 50% Electrical and	1,630,273	15				1,630,273				0	0	0	0	107,352	107,352	107,352	107,352	107,352	107,352	0	0	0	0	80,514	80,514	80,514	80,514	80,514	80,514	0	0	0	0	24,154	22,946	21,739	20,531	19,323	18,116	
General 50% Tank / Civil	1,630,273	50				1,630,273				0	0	0	0	32,205	32,205	32,205	32,205	32,205	32,205	0	0	0	0	80,514	80,514	80,514	80,514	80,514	80,514	0	0	0	0	24,154	22,946	21,739	20,531	19,323	18,116	
Land Purchase - Non Depreciating	1,300,000	0				1,300,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	65,000	65,000	65,000	65,000	65,000	65,000	0	0	0	0	19,500	18,525	17,550	16,575	15,600	14,625	
Opex	0	0		0						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11,115,000		0	0	0	11,115,000	0	0	0	0	0	0	0	344,715	344,715	344,715	344,715	344,715	344,715	0	0	0	0	555,750	555,750	555,750	555,750	555,750	555,750	0	0	0	0	166,725	158,389	150,053	141,716	133,380	125,044	
Option - Estimate 50%																																								
Conveyance from WWTP to	5,520,938	75				5,520,938				0	0	0	0	73,613	73,613	73,613	73,613	73,613	73,613	0	0	0	0	276,047	276,047	276,047	276,047	276,047	276,047	0	0	0	0	82,814	78,673	74,533	70,392	66,251	62,111	
Conveyance from WWTP to	1,380,234	35				1,380,234				0	0	0	0	39,435	39,435	39,435	39,435	39,435	39,435	0	0	0	0	69,012	69,012	69,012	69,012	69,012	69,012	0	0	0	0	20,704	19,668	18,633	17,598	16,563	15,528	
Irrigation scheme and reservoir	4,138,398	15				4,138,398				0	0	0	0	277,227	277,227	277,227	277,227	277,227	277,227	0	0	0	0	207,920	207,920	207,920	207,920	207,920	207,920	0	0	0	0	62,376	59,257	56,138	53,020	49,901	46,782	
Irrigation scheme and reservoir	4,138,398	50				4,138,398				0	0	0	0	83,168	83,168	83,168	83,168	83,168	83,168	0	0	0	0	207,920	207,920	207,920	207,920	207,920	207,920	0	0	0	0	62,376	59,257	56,138	53,020	49,901	46,782	
General 50% Electrical and	3,736,016	15				3,736,016				0	0	0	0	247,734	247,734	247,734	247,734	247,734	247,734	0	0	0	0	185,801	185,801	185,801	185,801	185,801	185,801	0	0	0	0	55,740	52,953	50,166	47,379	44,592	41,805	
General 50% Tank / Civil	3,736,016	50				3,736,016				0	0	0	0	74,320	74,320	74,320	74,320	74,320	74,320	0	0	0	0	185,801	185,801	185,801	185,801	185,801	185,801	0	0	0	0	55,740	52,953	50,166	47,379	44,592	41,805	
Land Purchase - Non Depreciating	3,000,000	0				3,000,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	150,000	150,000	150,000	150,000	150,000	150,000	0	0	0	0	45,000	42,750	40,500	38,250	36,000	33,750	
Opex	0	0		0						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	25,650,000		0	0	0	25,650,000	0	0	0	0	0	0	0	795,497	795,497	795,497	795,497	795,497	795,497	0	0	0	0	1,282,500	1,282,500	1,282,500	1,282,500	1,282,500	1,282,500	0	0	0	0	384,750	365,513	346,275	327,038	307,800	288,563	

KHO Reworked WASTEWATER: KHO WWTP Preferred Upgrade Option (3: Intermittent Decanting Aerated Lagoon) HG report Nov 2020.										
AVERAGE CAPITAL Rate - per connection	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Option	\$ -	\$ -	\$ -	\$ 256.00	\$ 253.35	\$ 250.72	\$ 248.06	\$ 245.42	\$ 242.77	\$ 240.13

OPERATING Rate per connection	Rate based on open spend on Options
Option	

Current connections	CAPITAL	OPERATING
Connections	1,695	12764
Availability	74	
Pans	781	4141
Weighted Numbers	2238	15249

Interest Rates									
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
0.022	0.018	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

			Cost Estimates							Depreciation										Debt Repayment										Interest										
Asset Detail	Total Spend	Average Depreciable Life	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
Option																																								
Inlet Works	1,368,965	15			1,368,965					0	0	0	91,264	91,264	91,264	91,264	91,264	91,264	91,264	0	0	0	68,448	68,448	68,448	68,448	68,448	68,448	68,448	0	0	0	20,534	19,508	18,481	17,454	16,428	15,401	14,374	
Secondary Treatment	2,177,280	20			2,177,280					0	0	0	108,864	108,864	108,864	108,864	108,864	108,864	108,864	0	0	0	108,864	108,864	108,864	108,864	108,864	108,864	108,864	0	0	0	32,659	31,026	29,393	27,760	26,127	24,494	22,861	
Tertiary Treatment	930,375	15			930,375					0	0	0	60,692	60,692	60,692	60,692	60,692	60,692	60,692	0	0	0	45,519	45,519	45,519	45,519	45,519	45,519	45,519	0	0	0	13,656	12,973	12,290	11,607	10,925	10,242	9,559	
Solids Processing	1,533,168	20			1,533,168					0	0	0	76,658	76,658	76,658	76,658	76,658	76,658	76,658	0	0	0	76,658	76,658	76,658	76,658	76,658	76,658	76,658	0	0	0	22,998	21,848	20,698	19,548	18,398	17,248	16,098	
Controls and Electrical	561,708	15			561,708					0	0	0	37,447	37,447	37,447	37,447	37,447	37,447	37,447	0	0	0	28,085	28,085	28,085	28,085	28,085	28,085	28,085	0	0	0	8,426	8,004	7,583	7,162	6,740	6,319	5,898	
Buildings	311,774	50			311,774					0	0	0	5,235	5,235	5,235	5,235	5,235	5,235	5,235	0	0	0	15,589	15,589	15,589	15,589	15,589	15,589	15,589	0	0	0	4,677	4,443	4,209	3,975	3,741	3,507	3,274	
Site Upgrades	420,000	30			420,000					0	0	0	14,000	14,000	14,000	14,000	14,000	14,000	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7,283,270		0	0	7,283,270	0	0	0	0	0	0	0	395,161	395,161	395,161	395,161	395,161	395,161	395,161	0	0	0	343,164	343,164	343,164	343,164	343,164	343,164	343,164	0	0	0	102,949	97,802	92,654	87,507	82,359	77,212	72,064	

Kaitia WASTEWATER: KTA WWTP Preferred Upgrade Option (1: Remove wetland + upgrade SRS + aerators + baffle curtain +clarifier + chemical dosing + UV) HG report Nov 2020 .

AVERAGE CAPITAL Rate - per connection										
	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Option	\$ -	\$ -	\$ -	\$ 103.50	\$ 102.31	\$ 101.16	\$ 99.99	\$ 98.82	\$ 97.65	\$ 96.48

OPERATING Rate per connection	Rate based on opex spend on Options
Option	\$ 71.06

Current connections	CAPITAL	OPERATING
Connections	2,605	12764
Availability	96	
Pans	852	4141
Weighted Numbers	3212	15249

Interest Rates									
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
0.022	0.018	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

			Cost Estimates							Depreciation										Debt Repayment										Interest										
Asset Detail	Total Spend	Average Depreciable Life	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
Option																																								
Septage Receiving System	119,772	20			119,772					0	0	0	5,989	5,989	5,989	5,989	5,989	5,989	5,989	0	0	0	5,989	5,989	5,989	5,989	5,989	5,989	5,989	0	0	0	1,797	1,707	1,617	1,527	1,437	1,347	1,258	
Aerators and Baffle Curtains	2,855,624	20			2,855,624					0	0	0	142,781	142,781	142,781	142,781	142,781	142,781	142,781	0	0	0	142,781	142,781	142,781	142,781	142,781	142,781	142,781	0	0	0	42,834	40,693	38,551	36,409	34,267	32,126	29,984	
Tertiary System	836,830	15			836,830					0	0	0	55,789	55,789	55,789	55,789	55,789	55,789	55,789	0	0	0	41,842	41,842	41,842	41,842	41,842	41,842	41,842	0	0	0	12,552	11,925	11,297	10,670	10,042	9,414	8,787	
Site Upgrades 1	273,603	20			273,603					0	0	0	13,680	13,680	13,680	13,680	13,680	13,680	13,680	0	0	0	13,680	13,680	13,680	13,680	13,680	13,680	13,680	0	0	0	4,104	3,899	3,694	3,488	3,283	3,078	2,873	
Site Upgrades 2	273,603	50			273,603					0	0	0	5,472	5,472	5,472	5,472	5,472	5,472	5,472	0	0	0	13,680	13,680	13,680	13,680	13,680	13,680	13,680	0	0	0	4,104	3,899	3,694	3,488	3,283	3,078	2,873	
Opex	907,000	0			907,000					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5,266,432		0	0	5,266,432	0	0	0	0	0	0	0	223,711	223,711	223,711	223,711	223,711	223,711	223,711	0	0	0	217,972	217,972	217,972	217,972	217,972	217,972	217,972	0	0	0	65,391	62,122	58,852	55,583	52,313	49,044	45,774	

Kaikohe WASTEWATER: Kaikohe WWTP Disposal to Land high level cost estimate (based on Beca estimate dated 30 Oct 2020)												
AVERAGE CAPITAL Rate - per connection												
Connection	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10		
Option Estimate	\$ -	\$ -	\$ -	\$ -	\$ 70.89	\$ 69.74	\$ 68.58	\$ 67.42	\$ 66.27	\$ 65.11		
Option Estimate 35%	\$ -	\$ -	\$ -	\$ -	\$ 46.08	\$ 45.33	\$ 44.58	\$ 43.83	\$ 43.08	\$ 42.32		
Option Estimate 50%	\$ -	\$ -	\$ -	\$ -	\$ 106.34	\$ 104.60	\$ 102.87	\$ 101.14	\$ 99.40	\$ 97.67		

OPERATING Rate per connection	Rate based on open spend on Options
Option Estimate	\$ -
Option Estimate 35%	\$ -
Option Estimate 50%	\$ -

Current connections	CAPITAL	OPERATING
Connections	12,764	12,764
Availability		
Pans		4141
Weighted Numbers	12764	15249

Interest Rates									
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
0.022	0.018	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

			Cost Estimates								Depreciation										Debt Repayment										Interest									
Asset Detail	Total Spend	Average Depreciable Life	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
Option Estimate																																								
Conveyance from WWTP to	3,680,625	75				3,680,625				0	0	0	0	49,075	49,075	49,075	49,075	49,075	49,075	0	0	0	0	184,031	184,031	184,031	184,031	184,031	184,031	0	0	0	0	55,209	52,449	49,688	46,928	44,168	41,407	
Conveyance from WWTP to	920,156	35				920,156				0	0	0	0	26,290	26,290	26,290	26,290	26,290	26,290	0	0	0	0	46,008	46,008	46,008	46,008	46,008	46,008	0	0	0	0	13,802	13,112	12,422	11,732	11,042	10,352	
Irrigation scheme and reservoir	2,772,266	15				2,772,266				0	0	0	0	184,818	184,818	184,818	184,818	184,818	184,818	0	0	0	0	138,613	138,613	138,613	138,613	138,613	138,613	0	0	0	0	41,584	39,505	37,426	35,346	33,267	31,188	
Irrigation scheme and reservoir	2,772,266	50				2,772,266				0	0	0	0	55,445	55,445	55,445	55,445	55,445	55,445	0	0	0	0	138,613	138,613	138,613	138,613	138,613	138,613	0	0	0	0	41,584	39,505	37,426	35,346	33,267	31,188	
General 50% Electrical and	2,477,344	15				2,477,344				0	0	0	0	165,156	165,156	165,156	165,156	165,156	165,156	0	0	0	0	123,867	123,867	123,867	123,867	123,867	123,867	0	0	0	0	37,160	35,302	33,444	31,586	29,728	27,870	
General 50% Tank / Civil	2,477,344	50				2,477,344				0	0	0	0	49,547	49,547	49,547	49,547	49,547	49,547	0	0	0	0	123,867	123,867	123,867	123,867	123,867	123,867	0	0	0	0	37,160	35,302	33,444	31,586	29,728	27,870	
Land Purchase - Non Depreciating	2,000,000	0				2,000,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	30,000	28,500	27,000	25,500	24,000	22,500	
Opex	0	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	17,100,000		0	0	0	17,100,000	0	0	0	0	0	0	0	530,331	530,331	530,331	530,331	530,331	530,331	0	0	0	0	855,000	855,000	855,000	855,000	855,000	855,000	0	0	0	0	256,500	243,675	230,850	218,025	205,200	192,375	
Option Estimate 35%																																								
Conveyance from WWTP to	2,392,406	75				2,392,406				0	0	0	0	31,899	31,899	31,899	31,899	31,899	31,899	0	0	0	0	119,620	119,620	119,620	119,620	119,620	119,620	0	0	0	0	35,886	34,092	32,297	30,503	28,709	26,915	
Conveyance from WWTP to	598,102	35				598,102				0	0	0	0	17,089	17,089	17,089	17,089	17,089	17,089	0	0	0	0	29,905	29,905	29,905	29,905	29,905	29,905	0	0	0	0	8,972	8,523	8,074	7,626	7,177	6,729	
Irrigation scheme and reservoir	1,801,973	15				1,801,973				0	0	0	0	120,132	120,132	120,132	120,132	120,132	120,132	0	0	0	0	90,099	90,099	90,099	90,099	90,099	90,099	0	0	0	0	27,030	25,678	24,327	22,975	21,624	20,272	
Irrigation scheme and reservoir	1,801,973	50				1,801,973				0	0	0	0	36,039	36,039	36,039	36,039	36,039	36,039	0	0	0	0	90,099	90,099	90,099	90,099	90,099	90,099	0	0	0	0	27,030	25,678	24,327	22,975	21,624	20,272	
General 50% Electrical and	1,610,273	15				1,610,273				0	0	0	0	107,352	107,352	107,352	107,352	107,352	107,352	0	0	0	0	80,514	80,514	80,514	80,514	80,514	80,514	0	0	0	0	24,154	22,946	21,739	20,531	19,323	18,116	
General 50% Tank / Civil	1,610,273	50				1,610,273				0	0	0	0	32,205	32,205	32,205	32,205	32,205	32,205	0	0	0	0	80,514	80,514	80,514	80,514	80,514	80,514	0	0	0	0	24,154	22,946	21,739	20,531	19,323	18,116	
Land Purchase - Non Depreciating	1,300,000	0				1,300,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	65,000	65,000	65,000	65,000	65,000	65,000	0	0	0	0	19,500	18,525	17,550	16,575	15,600	14,625	
Opex	0	0	0							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11,115,000		0	0	0	11,115,000	0	0	0	0	0	0	0	344,715	344,715	344,715	344,715	344,715	344,715	0	0	0	0	555,750	555,750	555,750	555,750	555,750	555,750	0	0	0	0	166,725	158,389	150,053	141,716	133,380	125,044	
Option Estimate 50%																																								
Conveyance from WWTP to	5,520,938	75				5,520,938				0	0	0	0	73,613	73,613	73,613	73,613	73,613	73,613	0	0	0	0	276,047	276,047	276,047	276,047	276,047	276,047	0	0	0	0	82,814	78,673	74,533	70,392	66,251	62,111	
Conveyance from WWTP to	1,380,234	35				1,380,234				0	0	0	0	39,435	39,435	39,435	39,435	39,435	39,435	0	0	0	0	69,012	69,012	69,012	69,012	69,012	69,012	0	0	0	0	20,704	19,668	18,633	17,598	16,563	15,528	
Irrigation scheme and reservoir	4,138,398	15				4,138,398				0	0	0	0	277,227	277,227	277,227	277,227	277,227	277,227	0	0	0	0	207,920	207,920	207,920	207,920	207,920	207,920	0	0	0	0	62,376	59,257	56,138	53,020	49,901	46,782	
Irrigation scheme and reservoir	4,138,398	50				4,138,398				0	0	0	0	83,168	83,168	83,168	83,168	83,168	83,168	0	0	0	0	207,920	207,920	207,920	207,920	207,920	207,920	0	0	0	0	62,376	59,257	56,138	53,020	49,901	46,782	
General 50% Electrical and	3,736,016	15				3,736,016				0	0	0	0	247,734	247,734	247,734	247,734	247,734	247,734	0	0	0	0	185,801	185,801	185,801	185,801	185,801	185,801	0	0	0	0	55,740	52,953	50,166	47,379	44,592	41,805	
General 50% Tank / Civil	3,736,016	50				3,736,016				0	0	0	0	74,320	74,320	74,320	74,320	74,320	74,320	0	0	0	0	185,801	185,801	185,801	185,801	185,801	185,801	0	0	0	0	55,740	52,953	50,166	47,379	44,592	41,805	
Land Purchase - Non Depreciating	3,000,000	0				3,000,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	150,000	150,000	150,000	150,000	150,000	150,000	0	0	0	0	45,000	42,750	40,500	38,250	36,000	33,750	
Opex	0	0	0							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	25,650,000		0	0	0	25,650,000	0	0	0	0	0	0	0	795,497	795,497	795,497	795,497	795,497	795,497	0	0	0	0	1,282,500	1,282,500	1,282,500	1,282,500	1,282,500	1,282,500	0	0	0	0	384,750	365,513	346,275	327,038	307,800	288,563	

Kaitia WASTEWATER: Kaitiote WWTP Disposal to Land high level cost estimate (based on Beas estimate dated 30 Oct 2020)												
AVERAGE CAPITAL Rate - per connection												
connection	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10		
Option Estimate	\$ -	\$ -	\$ -	\$ -	\$ 70.89	\$ 69.74	\$ 68.58	\$ 67.42	\$ 66.27	\$ 65.11		
Option Estimate 35%	\$ -	\$ -	\$ -	\$ -	\$ 46.08	\$ 45.33	\$ 44.58	\$ 43.83	\$ 43.08	\$ 42.32		
Option Estimate 50%	\$ -	\$ -	\$ -	\$ -	\$ 106.34	\$ 104.60	\$ 102.87	\$ 101.14	\$ 99.40	\$ 97.67		

	Rate based on opex
OPERATING Rate per connection	pend on Options
Option Estimate	\$ -
Option Estimate 35%	\$ -
Option Estimate 50%	

Current connections	CAPITAL	OPERATING
Connections	12,764	12,764
Availability		
Pans		4,411
Weighted Numbers	12,764	15,249

Interest Rates									
Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
0.022	0.018	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

			Cost Estimates							Depreciation										Debt Repayment										Interest										
Asset Detail	Total Spend	Average Depreciable Life	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	
Option Estimate																																								
Conveyance from WWTP to	3,680,625	75				3,680,625				0	0	0	0	40,075	40,075	40,075	40,075	40,075	40,075	0	0	0	0	184,031	184,031	184,031	184,031	184,031	184,031	0	0	0	0	55,209	52,449	49,688	46,928	44,168	41,407	
Conveyance from WWTP to	920,156	35				920,156				0	0	0	0	26,290	26,290	26,290	26,290	26,290	26,290	0	0	0	0	46,008	46,008	46,008	46,008	46,008	46,008	0	0	0	0	13,802	13,112	12,422	11,732	11,042	10,352	
Irrigation scheme and reservoir	2,772,266	15				2,772,266				0	0	0	0	184,818	184,818	184,818	184,818	184,818	184,818	0	0	0	0	138,613	138,613	138,613	138,613	138,613	138,613	0	0	0	0	41,584	39,505	37,426	35,346	33,267	31,188	
Irrigation scheme and reservoir	2,772,266	50				2,772,266				0	0	0	0	55,445	55,445	55,445	55,445	55,445	55,445	0	0	0	0	138,613	138,613	138,613	138,613	138,613	138,613	0	0	0	0	41,584	39,505	37,426	35,346	33,267	31,188	
General 50% Electrical and	2,477,344	15				2,477,344				0	0	0	0	165,156	165,156	165,156	165,156	165,156	165,156	0	0	0	0	123,867	123,867	123,867	123,867	123,867	123,867	0	0	0	0	37,160	35,302	33,444	31,586	29,728	27,870	
General 50% Tank / Civil	2,477,344	50				2,477,344				0	0	0	0	40,547	40,547	40,547	40,547	40,547	40,547	0	0	0	0	123,867	123,867	123,867	123,867	123,867	123,867	0	0	0	0	37,160	35,302	33,444	31,586	29,728	27,870	
Land Purchase - Non Depreciating	2,000,000	0				2,000,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000	100,000	100,000	100,000	100,000	100,000	0	0	0	0	30,000	28,500	27,000	25,500	24,000	22,500	
Opex	0	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	17,100,000					17,100,000				0	0	0	0	530,331	530,331	530,331	530,331	530,331	530,331	0	0	0	0	855,000	855,000	855,000	855,000	855,000	855,000	0	0	0	0	256,500	243,675	230,850	218,025	205,200	192,375	
Option Estimate 35%																																								
Conveyance from WWTP to	2,392,406	75				2,392,406				0	0	0	0	31,899	31,899	31,899	31,899	31,899	31,899	0	0	0	0	119,620	119,620	119,620	119,620	119,620	119,620	0	0	0	0	35,886	34,092	32,297	30,503	28,709	26,915	
Conveyance from WWTP to	598,102	35				598,102				0	0	0	0	17,089	17,089	17,089	17,089	17,089	17,089	0	0	0	0	29,905	29,905	29,905	29,905	29,905	29,905	0	0	0	0	8,972	8,523	8,074	7,626	7,177	6,729	
Irrigation scheme and reservoir	1,801,973	15				1,801,973				0	0	0	0	120,132	120,132	120,132	120,132	120,132	120,132	0	0	0	0	90,099	90,099	90,099	90,099	90,099	90,099	0	0	0	0	27,030	25,678	24,327	22,975	21,624	20,272	
Irrigation scheme and reservoir	1,801,973	50				1,801,973				0	0	0	0	36,039	36,039	36,039	36,039	36,039	36,039	0	0	0	0	90,099	90,099	90,099	90,099	90,099	90,099	0	0	0	0	27,030	25,678	24,327	22,975	21,624	20,272	
General 50% Electrical and	1,630,273	15				1,630,273				0	0	0	0	107,352	107,352	107,352	107,352	107,352	107,352	0	0	0	0	80,514	80,514	80,514	80,514	80,514	80,514	0	0	0	0	24,154	22,946	21,739	20,531	19,323	18,116	
General 50% Tank / Civil	1,630,273	50				1,630,273				0	0	0	0	32,205	32,205	32,205	32,205	32,205	32,205	0	0	0	0	80,514	80,514	80,514	80,514	80,514	80,514	0	0	0	0	24,154	22,946	21,739	20,531	19,323	18,116	
Land Purchase - Non Depreciating	1,300,000	0				1,300,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	65,000	65,000	65,000	65,000	65,000	65,000	0	0	0	0	19,500	18,525	17,550	16,575	15,600	14,625	
Opex	0	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11,115,000					11,115,000				0	0	0	0	344,715	344,715	344,715	344,715	344,715	344,715	0	0	0	0	555,750	555,750	555,750	555,750	555,750	555,750	0	0	0	0	166,725	158,389	150,053	141,716	133,380	125,044	
Option Estimate 50%																																								
Conveyance from WWTP to	5,520,938	75				5,520,938				0	0	0	0	73,613	73,613	73,613	73,613	73,613	73,613	0	0	0	0	276,047	276,047	276,047	276,047	276,047	276,047	0	0	0	0	82,814	78,673	74,533	70,392	66,251	62,111	
Conveyance from WWTP to	1,380,234	35				1,380,234				0	0	0	0	39,435	39,435	39,435	39,435	39,435	39,435	0	0	0	0	69,012	69,012	69,012	69,012	69,012	69,012	0	0	0	0	20,704	19,668	18,633	17,598	16,563	15,528	
Irrigation scheme and reservoir	4,158,398	15				4,158,398				0	0	0	0	277,227	277,227	277,227	277,227	277,227	277,227	0	0	0	0	207,920	207,920	207,920	207,920	207,920	207,920	0	0	0	0	62,376	59,257	56,138	53,020	49,901	46,782	
Irrigation scheme and reservoir	4,158,398	50				4,158,398				0	0	0	0	83,168	83,168	83,168	83,168	83,168	83,168	0	0	0	0	207,920	207,920	207,920	207,920	207,920	207,920	0	0	0	0	62,376	59,257	56,138	53,020	49,901	46,782	
General 50% Electrical and	3,736,016	15				3,736,016				0	0	0	0	247,734	247,734	247,734	247,734	247,734	247,734	0	0	0	0	185,801	185,801	185,801	185,801	185,801	185,801	0	0	0	0	55,740	52,953	50,166	47,379	44,592	41,805	
General 50% Tank / Civil	3,736,016	50				3,736,016				0	0	0	0	74,320	74,320	74,320	74,320	74,320	74,320	0	0	0	0	185,801	185,801	185,801	185,801	185,801	185,801	0	0	0	0	55,740	52,953	50,166	47,379	44,592	41,805	
Land Purchase - Non Depreciating	3,000,000	0				3,000,000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	150,000	150,000	150,000	150,000	150,000	150,000	0	0	0	0	45,000	42,750	40,500	38,250	36,000	33,750	
Opex	0	0								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	25,690,000					25,690,000				0	0	0	0	795,497	795,497	795,497	795,497	795,497	795,497	0	0	0	0	1,282,500	1,282,500	1,282,500	1,282,500	1,282,500	1,282,500	0	0	0	0	384,750	365,513	346,275	327,038	307,800	288,563	



## **6 INFORMATION REPORTS**

### **6.1 TOURISM INFRASTRUCTURE FUND ROUND FOUR, BOAT RAMP STUDY**

**File Number:** A3160545

**Author:** David Clamp, Manager - Major and Recovery Projects

**Authoriser:** Andy Finch, General Manager - Infrastructure and Asset Management

#### **TAKE PŪRONGO / PURPOSE OF THE REPORT**

To present the findings of the Tourism Infrastructure Fund (TIF) Round four Boat Ramp Study document.

#### **WHAKARĀPOOTO MATUA / EXECUTIVE SUMMARY**

The Far North has a trailer-boat car-park supply and demand issue that is becoming more acute as the district experiences ongoing increases in residential growth, visitor numbers, trailer-boating popularity and the size of trailer-boats.

The Far North has seen residential population growth rates of over 20% between 2013 and 2018, according to census results. The proportion of New Zealanders indulging in recreational boating (42 percent) has remained consistent throughout this period of population growth.

The Bay of Islands exemplifies the problem that exists across the District. There are an estimated 2,900 trailer-boat users living in the wider Bay of Islands catchment area yet there are only 48 car-parks dedicated to boat-trailers and an estimated all-in total of 160 potential standard (legal) spaces adjacent to boat-ramps.

This pressure is mirrored when it comes to moorings for non-trailer boats. Applications for new moorings have increased on an annual basis and comfortably outstrip supply. Current mooring locations have no space for new moorings. This exacerbates the pressure on land-based recreational boating infrastructure as the attraction of a trailer-boat option increases.

Direct spend on boat-ramp operational and capital works maintenance right across the Far North district is in the region of \$100,000 annually. Given the significant number of boat-ramps and the number of people using them, maintenance costs are low.

The financial pressure around the expansion of boating infrastructure in the Far North is associated with the need to increase capacity, in particular carparking, rather than annual operating maintenance.

With opportunities to acquire waterfront land suitable for expanding boating infrastructure few and far between, this report outlines three ways in which Council can address the increasingly unsustainable pressure being placed on limited recreational boating facilities across the District:

- i. acquire land for enhancing current facilities and for new sites - in conjunction with the development of coastal recreational activity and general public access.
- ii. develop a strategic land acquisition funding source - when appropriate land does become available Council needs the ability to move quickly and with certainty to acquire it.
- iii. identify upgrades to existing facilities.

#### **TŪTOHUNGA / RECOMMENDATION**

**That the Infrastructure Committee receives the report Tourism Infrastructure Fund Round Four, Boat Ramp Study TIF-R4-002 FNDC.**

**TĀHUHU KŌRERO / BACKGROUND**

In preparing applications to the Tourism Infrastructure Fund for 2019/20 project funding it became clear that significant growth in the number of visitors to, and people choosing to live in, the Far North was placing an increasing strain on the district's boat launching facilities. It was apparent that a stock-take and review of these facilities was required to ensure the best-value solutions were considered and that strong data was available to support future external funding applications.

**MATAPAKI ME NGĀ KŌWHIRINGA / DISCUSSION AND NEXT STEPS**

The document will be used to support infrastructure planning and to provide the data and background required to support future external funding applications.

**PĀNGA PŪTEA ME NGĀ WĀHANGA TAHUA / FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION**

There are no immediate financial implications.

**ĀPITIHINGA / ATTACHMENTS**

1. FNDC TIF Boat Ramp Study March 2021 - A3160546 (under separate cover) 

**6.2 INFRASTRUCTURE AND ASSET MANAGEMENT (IAM) MONTHLY BUSINESS REPORT FOR MARCH 2021**

**File Number:** A3162730

**Author:** Tania George, EA to GM - Infrastructure and Asset Management

**Authoriser:** Andy Finch, General Manager - Infrastructure and Asset Management

**TAKE PŪRONGO / PURPOSE OF THE REPORT**

To present a summary of Infrastructure and Asset Management activity and information items.

**WHAKARĀPOPOTO MATUA / EXECUTIVE SUMMARY**

The Infrastructure and Asset Management Update provides an overview of Infrastructure and Asset Management activity for the period of March 2021.

**TŪTOHUNGA / RECOMMENDATION**

**That the Infrastructure Committee receive the report Infrastructure and Asset Management (IAM) Monthly Business Report for March 2021.**

**TĀHUHU KŌRERO / BACKGROUND**

This report presents a range of performance and interest items focussed around Council Infrastructure.

**MATAPAKI ME NGĀ KŌWHIRINGA / DISCUSSION AND NEXT STEPS**

The information is attached in the form of a report.

**PĀNGA PŪTEA ME NGĀ WĀHANGA TAHUA / FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION**

Nil.

**ĀPITIHINGA / ATTACHMENTS**

1. IAM Business Report as at 31 March 2021 - A3162686 (under separate cover) 

**7 TE WĀHANGA TŪMATAITI / PUBLIC EXCLUDED****RESOLUTION TO EXCLUDE THE PUBLIC****RECOMMENDATION**

That the public be excluded from the following parts of the proceedings of this meeting.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

<b>General subject of each matter to be considered</b>	<b>Reason for passing this resolution in relation to each matter</b>	<b>Ground(s) under section 48 for the passing of this resolution</b>
<b>7.1 - Confirmation of Previous Minutes - Public Excluded</b>	s7(2)(h) - the withholding of the information is necessary to enable Council to carry out, without prejudice or disadvantage, commercial activities	s48(1)(a)(i) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
<b>7.2 - Proposed Paihia Water Treatment Plant Project Delivery Roadmap</b>	s48(1)(d) - the exclusion of the public from the whole or the relevant part of the proceedings of the meeting is necessary to enable the Council to deliberate in private on its decision or recommendation where a right of appeal lies to any court or tribunal against the final decision of the Council in these proceedings	s48(1)(d) - the exclusion of the public from the whole or the relevant part of the proceedings of the meeting is necessary to enable the Council to deliberate in private on its decision or recommendation where a right of appeal lies to any court or tribunal against the final decision of the Council in these proceedings

**8 KARAKIA WHAKAMUTUNGA – CLOSING PRAYER**

**9 TE KAPINGA HUI / MEETING CLOSE**