Far North District Council



Te Kaunihera o Tai Tokerau ki te Raki

AGENDA

Infrastructure Committee Meeting

Wednesday, 10 February 2021

Time: Location: 9.30 am 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

Far North District Council	Authorising Body	Mayor/Council
Te Kaunihera o Tai Tokerau ki te Raki	Status	Standing Committee
	Title	Infrastructure Committee Terms of Reference
	Approval Date	7 May 2020
CONNUTTEE	Responsible Officer	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 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
 - o 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

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
Hon John Carter QSO	Board Member of the Local Government Protection Programme	Board Member of the Local Government Protection Program		
	Carter Family Trust			
Felicity Foy (Chair)	Shareholder - Northland Planning & Development 2020	A planning and development consultancy that is based in the Far North and have two employees. Property owner of Commerce Street, Kaitaia		I will abstain from any debate and voting on proposed plan change items for the Far North District Plan. I will declare a conflict of interest with any planning matters that relate to resource consent processing, and the management of the resource consents planning team. I will not enter into any contracts with
				Council for over \$25,000 per year. I have previously contracted to Council to process resource consents as consultant planner.
	Flick Trustee Ltd	I am the director of this company that is the company trustee of Flick Family Trust that owns properties Seaview Road – Cable Bay, and Allen Bell Drive - Kaitaia.		
	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.	

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	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 7 dwellings on Church Road, Kaingaroa and 2 dwellings on Allen Bell Drive, Kaitaia, and 1 property on North Road, Kaitaia, 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.	
	Previous employment at FNDC 2007-16	I consider the staff members at FNDC to be my friends		
	Shareholder of Coastline Plumbing NZ Limited			
Felicity Foy - Partner	Director of Coastline Plumbing NZ Limited			
	Friends with some FNDC employees			
Deputy Mayor Ann	Waipapa Business Association	Member		Case by case
Court (Deputy)	Warren Pattinson Limited	Shareholder	Building company. FNDC is a regulator and enforcer	Case by case
	Kerikeri Irrigation	Supplies my water		No
	Top Energy	Supplies my power		No other interest greater than the publics
	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	Declare interest and abstain from voting.

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
			have a direct impact (positive/adverse)	
	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.
	Warren Pattinson	My husband is a builder and may do work for Council staff		Case by case
Ann Court - Partner	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.
David Collard	Snapper Bonanza 2011 Limited	45% Shareholder and Director		
	Trustee of Te Ahu Charitable Trust	Council delegate to this board		
Mate Radich	No form received			
Kelly Stratford	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

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Bay of Islands College	Parent Elected Trustee	None perceived	If there was a conflict, I will step 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 mattes 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
Kelly	Chef and Barista	Opua Store	None perceived	
Stratford - Partner	Māori title land – Moerewa	Shareholder	None perceived	If there was a conflict of interest, I would step aside from decision making
John Vujcich	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

Name	Responsibility (i.e. Chairperson etc)	Declaration of Interests	Nature of Potential Interest	Member's Proposed Management Plan
	Member	New Zealand Institute of Directors	Potential provider of training to Council	Declare a Conflict of Interest
	Member	Institute of IT Professionals	Unlikely, but possible provider of services to Council	Declare a Conflict of Interest
Mike Edmonds	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
Adele	N/A - FNDC Honorarium			
Gardner	The Far North 20/20, ICT Trust	Trustee		
	Te Ahu Charitable Trust	Trustee		
	ST Johns Kaitaia Branch	Trustee/ Committee Member		
	I know many FNDC staff members as I was an FNDC staff member from 1994-2008.			
Partner of Adele Gardner	N/A as Retired			

Far North District Council

Infrastructure Committee Meeting

will be held in the Council Chamber, Memorial Avenue, Kaikohe on:

Wednesday 10 February 2021 at 9.30 am

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1 KARAKIA TIMATANGA – OPENING PRAYER

2 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 DEPUTATION

No requests for deputations were received at the time of the Agenda going to print.

4 CONFIRMATION OF PREVIOUS MINUTES

4.1 CONFIRMATION OF PREVIOUS MINUTES

File Number:	A3052532
Author:	Kim Hammond, Meetings Administrator
Authoriser:	Aisha Huriwai, Team Leader Democracy Services

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.

RECOMMENDATION

That the Infrastructure Committee confirm that the minutes of the meeting held 2 December 2020 be confirmed as a true and correct record.

1) 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) 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.

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) FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

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

ATTACHMENTS

1. 2020-12-02 Infrastructure Committee Unconfirmed Minutes - A3023023 🗓 🛣

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.

Compliance requirement	Staff assessment
State the level of significance (high or low) of the issue or proposal as determined by the <u>Council's</u> <u>Significance and Engagement Policy</u>	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, 2 DECEMBER 2020 AT 9.30 AM

- **PRESENT:** Cr Felicity Foy, Deputy Mayor Ann Court, Cr Dave Collard, Cr Rachel Smith (Via TEAMS), Cr Kelly Stratford, Cr John Vujcich, Kaikohe-Hokianga Community Board Chairperson Mike Edmonds, Te Hiku Community Board Chairperson Adele Gardner (via TEAMS)
- 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 Corporate Services), Sheryl Gavin (General Manager Strategic Planning and Policy -Acting)

1 KARAKIA TIMATANGA – OPENING PRAYER

Councillor Foy read the Local Government Act to open the meeting followed by a Karakia from Councillor Stratford.

2 APOLOGIES AND DECLARATIONS OF INTEREST

That apologies from Mayor John Carter be received and accepted.

3 DEPUTATION

Nil

4 CONFIRMATION OF PREVIOUS MINUTES

4.1 CONFIRMATION OF PREVIOUS MINUTES

Agenda item 4.1 document number A3001125, pages 14 - 18 refers.

COMMITTEE RESOLUTION 2020/9

Moved: Cr Kelly Stratford Seconded: Cr Dave Collard

That the Infrastructure Committee confirm that the minutes of the meeting held 21 October 2020 be confirmed as a true and correct record.

CARRIED

5 INFORMATION REPORTS

5.1 INFRASTRUCTURE AND ASSET MANAGEMENT (IAM) MONTHLY BUSINESS REPORT FOR OCTOBER 2020

Agenda item 5.1 document number A3014745, pages 19 - 19 refers.

COMMITTEE RESOLUTION 2020/10

Moved: Cr Kelly Stratford Seconded: Deputy Mayor Ann Court That the Infrastructure Committee receive the report Infrastructure and Asset Management (IAM) Monthly Business Report for October 2020.

CARRIED

6 PUBLIC EXCLUDED

RESOLUTION TO EXCLUDE THE PUBLIC

COMMITTEE RESOLUTION 2020/11

Moved: Cr Felicity Foy Seconded: Cr John Vujcich

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:

to be considered	resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
6.1 - Ratcliffe's Bay Boat Trailer Parking	s7(2)(b)(ii) - the withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information	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
	s7(2)(i) - the withholding of the information is necessary to enable Council to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)	

7 MEETING CLOSE

The meeting closed at 11.23 am.

The minutes of this meeting will be confirmed at the Infrastructure Committee meeting to be held on 10 February 2021.

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CHAIRPERSON

5 INFORMATION REPORTS

5.1 ELECTROCOAGULATION WASTEWATER TREATMENT UPDATE

File Number:	A3036914
Author:	Tania George, EA to GM - Infrastructure and Asset Management
Authoriser:	Andy Finch, General Manager - Infrastructure and Asset Management

PURPOSE OF THE REPORT

The purpose of the report is to present the Electrocoagulation (EC) Wastewater Treatment report prepared for Council by BECA.

EXECUTIVE SUMMARY

- Elected Members have asked for information about the EC process for wastewater treatment.
- This report introduces a report prepared by BECA evaluating the process, with particular reference to the Taipa Wastewater Treatment plant (TWWTP).
- This report was presented to the Council meeting on 10 December 2020 and was referred back to the Infrastructure Committee for consideration.

RECOMMENDATION

That the Infrastructure Committee notes the report Electrocoagulation Wastewater Treatment.

1) BACKGROUND

The treatment of wastewater through the process of EC has been promoted over the past few years, in particular by Mr Kurmann in relation to the Resource Consent renewal for the TWWTP.

Council have commissioned BECA to undertake a review of the EC process. A copy of the full report is included as attachment 1.

2) DISCUSSION AND OPTIONS

The report prepared detailing the current assessment of EC technology and the applicability of an EC treatment plant for the Taipa East Coast Wastewater Scheme has been based on historic information held by Council, Mr Kurmann and a report on EC by National Institute of Water and Atmospheric Research (NIWA). Additional information was drawn from the Resource Consent hearing evidence for Taipa Wastewater treatment resource consent renewal and publicly available resources on the internet.

The key observations from the report are:

1. The EC process is a mature treatment technology based on the electrolytic liberation of soluble metal ions from metallic plates to provide coagulation of the wastewater stream. In addition to the liberation of metal ions there are a number of electrooxidation reactions that produce oxidants (hydroxide radicals, hypochlorite) that enhance the reduction of contaminants. Several commercial suppliers of EC equipment are available, including completely containerised units. All are located internationally outside of New Zealand.

2. EC has been successfully applied to a variety of commercial full-scale industrial applications. It is less frequently applied to municipal wastewater treatment, particularly at larger scale where it is less economic than conventional treatment processes. We are not aware of any EC treatment plants in New Zealand treating municipal wastewater.

3. The specific application of EC to the TWWTP Scheme has been considered as a concept proposal based on treatment of the wastewater from different locations within the existing pond system. The

preferred treatment location would be the effluent discharge from the final maturation pond. This location is considered to apply the lowest organic load to the EC process, consisting primarily of algae solids, and to make most use of the maturation pond volume for peak flow buffering.

4. Testing of EC treatment of algal pond effluent reported by NIWA and similar tests by Mr Kurmann has shown that a good-settling sludge can be obtained that would favour a simple clarifier for post treatment. Thickening of the sludge by centrifugation for disposal is considered by Mr Kurmann, although little detail of the equipment is available. The quantity of sludge produced has not been identified. The potential of sludge disposal to the existing settlement pond is an option to reduce dewatering costs.

5. The effluent quality from the EC process is required to meet the discharge criteria set out in the Resource Consent conditions. The performance of the EC process in terms of effluent suspended solids, BOD/COD, phosphorus, heavy metals and microbiology is considered likely to be adequate to meet the consent conditions. The ability of EC to meet the ammonia limit of <10mgN/L is less certain as removal rates of 50% - 80% may not be sufficient, given the relatively high inlet ammonia concentrations reported.

6. Capital and operating costs are difficult to determine from the available information specific to the TWWTP proposal as no actual equipment specification has been provided. Mr Kurmann has given a budget cost of the EC unit as \$950,000 and a cost of \$200,000 for the sludge dewatering centrifuge. Costs for the balance of plant, e.g. pumping, power supply, civil works, buildings etc. are not provided and would have to be estimated.

7. Power consumption has been estimated in the report based on NIWA test results and typical literature values for EC operation. A typical reported value is of the order of 1kWh/m3 treated. For the TWWTP consented design average flow of 790m3 /d a power demand of approximately 790kWh/d could be typical. At design flow this is an annual cost of some \$83,000. Power costs would vary depending on the installation location where there may be lower flows.

8. While solar power could be an option to offset the daily power demand it is unlikely that the cost of a battery system to cover night time and cloudy periods would be viable. Further financial analysis would be required to define CAPEX and operating return.

9. Other operating expenses relate to the periodic replacement of the electrodes (6 - 8 weeks) with an estimated cost of \$14,900 pa and an operator expense of \$8,500 pa (data from Mr Kurmann).

10. The current information provided on the detail of the proposed EC treatment process for the TWWTP is insufficient to assess whether the process will be economically viable for the improvement of the effluent for discharge to the stream or for irrigation.

Reason for the recommendation

To provide information relating to the electrocoagulation treatment process.

3) FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

There are no financial implications.

ATTACHMENTS

1. NZ1-16515038 - Electrocoagulation Wastewater Treatment - A2973395 🗓 🛣

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.

Compliance requirement	Staff assessment
State the level of significance (high or low) of the issue or proposal as determined by the <u>Council's</u> <u>Significance and Engagement Policy</u>	Low
State the relevant Council policies (external or internal), legislation, and/or community outcomes (as stated in the LTP) that relate to this decision.	N/A
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.	Potentially District wide.
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.	N/A
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.	N/A
State the financial implications and where budgetary provisions have been made to support this decision.	None
Chief Financial Officer review.	The Chief Financial Officer has reviewed this report

調 Beca

Electrocoagulation Wastewater Treatment

Evaluation for Taipa Wastewater Treatment Plant

Prepared for Far North District Council Prepared by Beca Limited

20 August 2020



Sensitivity: General

Electrocoagulation Wastewater Treatment

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Sensitivity: General

| Electrocoagulation Wastewater Treatment

Revision History

Revision Nº	Prepared By	Description	Date
	Rob Fullerton	Interim report	29/10/2019
	Rob Fullerton	Final report	24/7/2020
	Rob Fullerton	Final report + addendum	20/8/2020

Document Acceptance

Action	Name	Signed	Date
Prepared by	Rob Fullerton	La fullette	20/8/2020
Reviewed by	John Crawford	Maul	20/8/2020
Approved by	Rob Fullerton	for fullente	20/8/2020
on behalf of	Beca Limited		

 ${igodot}$ Beca 2020 (unless Beca has expressly agreed otherwise with the Client in writing).

This report has been prepared by Beca on the specific instructions of our Client. It is solely for our Client's use for the purpose for which it is intended in accordance with the agreed scope of work. Any use or reliance by any person contrary to the above, to which Beca has not given its prior written consent, is at that person's own risk.

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| Introduction |

1 Introduction

The Far North District Council (FNDC) East Coast Wastewater Scheme collects wastewater from the residential, commercial and school properties in the Taipa, Cable Bay, Coopers Beach and Mangonui communities and pumps to the wastewater treatment plant located to the south behind the built-up area at Taipa (Taipa WWTP). Treatment consists of three treatment basins in series followed by a maturation oxidation pond.



The three series basins operate as an aerated primary basin, a quiescent settlement basin and a mixed stabilisation basin. The stabilisation basin discharge enters a large maturation basin for effluent quality improvement through a long residence time (approximately 20 days), the growth of algae and the effect of sunlight. The treated effluent is pumped to wetlands that discharge to the Parapara Stream.

FNDC has been approached by a local equipment vendor (Maurilogical Ltd - Mr Kurmann) for consideration of upgrading the quality of the effluent by treatment with an electrocoagulation technology.

In 2018 NIWA prepared a report for FNDC titled Electrocoagulation of Wastewater Treatment Pond Effluent.⁺ The report provided a comprehensive review of the electrocoagulation technology and performance, and documented

bench-scale tests of electrocoagulation of algal wastewater pond water carried out at NIWA facilities using samples from the Cambridge WWTP. Operational requirements and treatment costs were presented.

This Beca report evaluates the technology, reviews the performance and costs, to objectively inform FNDC and to provide a basis for an implementation decision with reference to the Taipa Wastewater scheme. The comprehensive information on the EC technology and operating conditions provided in the NIWA report will be referenced where appropriate, rather than re-presenting data in this report.

2 Electrocoagulation

Electrocoagulation (EC) is not a new process and was first proposed in the late 19th Century as a sewage treatment process. Following a long period where EC was not a favoured technology for large scale application, it has re-emerged as a viable technology, particularly for treatment of industrial wastewaters containing heavy metals and complex organics. Municipal wastewater treatment by EC is still considered a niche application.

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¹ Electrocoagulation of Wastewater Treatment Pond Effluent – Electrocoagulation Review, NIWA, March 2018.

| Electrocoagulation |

Evidence tabled at the Northland Regional Council (NRC) resource consent hearing for the Taipa WWTP discharge in July 2019, noted that the treatment plant effluent after the wetlands was generally adequate for BOD, TSS and bacterial removal, however the ammonia concentration was considered excessive. Improvements for ammonia reduction were considered appropriate. The FNDC option to treat the maturation pond effluent with EC would target specifically the removal of algae, reduction of nutrients (N & P) and reduction of microorganisms. There are relatively few examples of this EC application, so the bench trials conducted by NIWA on algae pond waste water are particularly informative.

2.1 How does it work

The removal of suspended particles from wastewater to improve water quality is often achieved by adding a coagulating chemical such as alum or ferric chloride. When mixed in the wastewater the chemicals first dissolve to form aluminium or ferric ions, which carry a positive charge. Natural suspended particles, such as sediments or algae, carry a negative charge which is neutralised by the positive ions, causing the particles to clump together and form a sludge. Removing the sludge leaves cleaned water for discharge.

In its simplest form electrocoagulation is another means of putting aluminium or ferric ions into water. Rather than adding a chemical, the ions are "dissolved" directly from metal aluminium or iron electrodes using an electric current.



Figure 1: Configuration of EC cell

While the basic coagulation effect is similar for both chemical addition or EC, there are a number of other reactions that occur simultaneously with EC that can enhance the treatment performance (Figure 1). These include, formation of metal hydroxide flocs that capture small solids by enmeshment, cathodic liberation of oxidants (hydroxyl radicals OH-) that react to reduce the COD, liberation of hydrogen bubbles that assist to "float" the flocs for enhanced removal and electrical disruption of bacterial cells to reduce viable microorganisms, such as *E. coli*. If the wastewater contains sufficient chloride ions the electrical current also produces hypochlorite that increases oxidation of organic material, ammonia and reduction of microorganisms.

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2.2 Electrical configuration

Three different modes of electrical connection of the electrodes are applied in electrocoagulation as shown in Figure 2, (a) monopolar parallel, (b) monopolar series, (c) bipolar parallel.



Figure 2: Electrode electrical connection (image2)

The monopolar parallel connection (a) splits the current between all electrodes regardless of the resistance of the individual electrodes resulting in a lower voltage difference compared with serial connections (b). In the bipolar parallel connection (c), sacrificial electrodes are placed between parallel electrodes without electrical connection. The bipolar arrangement has simple setup and low maintenance. The EC bench test reported by NIWA and the trials by Andreas Kurmann submitted in the resource consent hearing used a bipolar parallel connection.

Passivation of the of the cathode due to the formation of an oxide layer results in a decrease in current flow between the electrodes leading to increased power consumption and decreased treatment efficiency. Various electrical power techniques have been developed to minimise cathodic passivation. Periodic polarity reversal and alternating pulse current (APC) are reported to significantly reduce passivation effects.

2.3 Electrode composition

The anode composition of the EC cell determines the nature of the reactions that will occur. For aluminium or iron electrodes the reactions add the related metal ions to the water to act as coagulant. Selection of the metal type for coagulation (aluminium or iron) is usually based on experience or bench-scale testing to determine the optimum metal.

The cathode is typically the same material as the anode although an inert material (SS or graphite) can be used. The NIWA and Mr Kurmann bench trials used an iron-iron electrode pair.

2.3.1 Electrodes for algae removal

For algal removal by EC both aluminium and iron electrodes have been used. Literature references appear to favour aluminium for algal removal. Aluminium electrodes produce cations with an oxidation number of +3 (Al³⁺), whereas iron electrodes produce cations with a mixed charge (Fe²⁺ and Fe³⁺) and can thus be a slightly weaker coagulant at some pH levels compared with Al³⁺. It is reported that iron electrodes perform better at lower pH and that the sludge produced is denser and settles faster. However, removal efficiency is also determined by electrode voltage and current density and electrical conductivity of the liquid, so the optimal electrode metal selection is site specific. The maturation pond pH will typically tend to rise (above pH 8) during the day due to photosynthesis and decline during darkness, so the overall performance difference between the different electrodes may be marginal. It is noted that the NIWA algal EC studies were carried out successfully with iron electrodes.

² Techno-economical evaluation of electrocoagulation for the textile wastewater using different electrode connections, Kobya M. et a, J.jhazmat, 2007



The presence of chlorides in the water generates hypochlorite at the anode which can become an additional oxidising agent and bactericide to increase COD removal and bacterial reduction. The release of hypochlorite also increases the reduction of ammonia by chlorination. No information is available on the chloride concentration in the Taipa wastewater but, given that the sewerage area is in the coastal fringe, there may be an elevated chloride level due to saline groundwater infiltration. Gaining an understanding of the chloride concentrations in the raw wastewater and post maturation pond effluent would be a necessary part of any characterisation programme for procurement of an EC system for Taipa.

2.4 EC Performance

2.4.1 Optimal performance conditions

There are multiple parameters that influence the optimal operating conditions of the EC process:

- Wastewater characteristics pH, TSS, TDS, electrical conductivity, ionic composition, temperature,
- Cell configuration electrode material, electrode orientation, inter-electrode spacing, electrical connection,
- Residence time wastewater flow rate, EC volume,
- Power input voltage, current, current density, polarity reversal.

2.4.2 Cell configuration - vertical/horizontal - electrical configuration - spacing

It is more common for EC electrodes to be placed in a vertical configuration with the waste flow either horizontal or vertical depending on the supplier. There are advantages and disadvantages of either arrangement.

Vertical orientation with upflow of the waste allows for evolved gasses from the electrodes to be expelled upwards with the waste thereby minimising the potential for solids to clog between the electrodes.

2.4.3 Power -voltage - current density - polarity reversal, pulsed AC

For electrocoagulation the anode material is sacrificial and "dissolves" as the coagulant chemical. The rate of anodic metal dissolution is governed by Faraday's law, which states that the mass of metal liberated is directly proportional to the quantity of electricity (charge) passed. The metal coagulant dose is therefore controlled by the current between the electrodes. The solution conductivity and electrode spacing determines required current and voltage necessary to achieve the required metal dose to achieve satisfactory coagulation. Some EC systems dose salt (NaCl) to maintain stable conductivity.

The power supply is typically drawn from the AC grid mains and conditioned to direct current (DC) to suit the operating settings of voltage and current of the EC unit. Automatic control of applied voltage and current to meet the required current density (metal coagulant dose) can be adjusted based on the conductivity. Automatic polarity reversal or pulsed AC is applied to minimise polarisation effects.

2.4.4 Electrode replacement

The loss of metal from the anode means that the anode system must be replaced on a regular basis when the plate cross sectional area reaches a minimum operating condition. To expedite the replacement operation the electrode assembly is generally constructed in a modular configuration whereby the complete assembly is replaced.

The plate life is determined by the rate of metal loss and the mass of the plate. For a 25 mg/L FeCl₃ equivalent dose (8.6mg/L Fe³⁺) at the consented Taipa ADWF of 790m³/d, the plate loss is approximately



6.8kg/d. Mr Kurmann's response to the Hearing Commissioner notes the requirement for electrode replacement every 6 to 8 weeks.

2.4.5 Removal of contaminants

The objective of the proposed EC treatment is to improve the quality of the wastewater discharge in respect of:

- a) Suspended solids (TSS), dissolved solids (TDS),
- b) Organics (COD, BOD),
- c) Nitrogen (ammonia, nitrate, organic),
- d) Phosphorus,
- e) Microbiological,
- f) Heavy metals.

a. Suspended and dissolved solids

The formation of positively charged metal ions within the EC reactor will coagulate (destabilise) negatively charged suspended solids (algae, biosolids) along with the formation of metal hydroxide flocs, resulting in the agglomeration of solids into a flocculant sludge within the EC reactor. Suspended solids removal can be by settlement or mechanical separation (e.g. centrifuge) from the clarified effluent. Settlement TSS removal rates >90% were reported in the NIWA EC trials on algae pond effluent.

b. Organics

A high level of COD-BOD removal could be expected by EC, especially if the maturation pond effluent is treated. The reduction of the COD-BOD fraction of the wastewater associated with suspended solids (algae, biomass) is effectively removed with the sludge. The soluble fractions will be reduced by the coagulation and oxidation at the electrodes. Greater than 90% of COD-BOD can be removed.

c. Nitrogen

The removal of nitrogen compounds by EC is variable. Organic nitrogen (as TKN) associated with particulate material, such as algae, is reduced when solids are removed. NIWA reports 50 – 80% TKN removal.

Nitrate removal is sensitive to the reaction time and the current density. Increasing the reaction time to an excess of 30 minutes and increasing the current density demonstrated a 96% nitrate removal using aluminium electrode pairs³. Results from Mr Kurmann's trials on Taipa settlement pond overflow indicate nitrate removal rates of up to 85% using iron electrodes. The current density was not stated.

EC reduction of ammonia is generally poor, typically around 50%. As effluent ammonia is one of the critical parameters identified in the Resource Consent as requiring reduction, the ability of the EC system to maximise removal is crucial. Enhanced removal of ammonia is demonstrated by some EC systems with increasing residence time and current density. The removal appears to be related to the electrolytic production of hypochlorite ions from the chloride content in the wastewater, leading to oxidation of ammonia by chlorination. Additional COD removal is also attributed to the generation of hypochlorite and oxidation of organic material. Whether the chloride content of the Taipa wastewater is sufficient to meet the ammonia and COD organic demand has not been determined. Current wastewater chloride data is not reported in the present results.

^a Improvement of aqueous nitrate removal by using electrocoagulation/electroflotation unit with vertical monopolar electrodes, M. Majlesi et al, Sustainable Environmental Research, 2016.



The NRC recommended Resource Consent conditions (July 2019) propose that the annual median ammonia – N concentration in effluent after upgraded treatment shall not exceed 10mgN/L. Ammonia results for the overflow of the settlement pond (pond 3) reported by Mr Kurmann indicate values of up to 73mg/L (Sample 29 5/2/2019). The Taipa and NIWA bench trials show it is unlikely that EC treatment of the pond effluent will consistently achieve the required ammonia removal of >80% to meet consent conditions. If the maturation pond ammonia concentration can be reduced by upstream process modifications, e.g. increased aeration capacity to encourage nitrification or augmentation of the chloride content, the EC treatment may be able to assist in meeting the proposed ammonia limits.

d. Phosphorus

Phosphorus (phosphate) removal by EC using aluminium or iron electrodes is effective and generally removal rates approach 100%. The phosphorus is chemically bound into the sludge. The NIWA bench trials report >99% DRP removal. The trials undertaken by Mr Kurmann on Taipa effluent record phosphorus (phosphate) concentrations after treatment of ~1mg/L or less, starting from levels of 20 – 30mg/L.

e. Microbiological

Bacterial concentrations are reduced during EC treatment due to coagulation of solids, cellular disruption by electric field between the electrodes, exposure to hydroxyl radicals (OH-) and by disinfection by hypochlorite produced from chloride. The NIWA study reports a 3-log₁₀ reduction in *E.coli* with algal pond water. Mr Kurmann also reports *E.coli* reductions in the similar 3-log₁₀ range (99.9%). Note that this does not mean the effluent is fully sterilised by EC treatment, only that the treated effluent could be expected to meet *E.coli* standards for recreational freshwater quality.

f. Heavy metals

Heavy metals removal efficiencies are determined by the electrode metal selection, the applied current density, the residence time and pH. Under neutral pH or alkaline conditions, the removal is generally close to 100% from the formation of metal hydroxide solids or adsorption onto the sludge. The Taipa wastewater is anticipated to have heavy metal concentrations typical of domestic sewage, with the expectation that heavy metals would be effectively removed with EC treatment. The precipitated metals would be recovered into the sludge. Sludge disposal should consider the heavy metal content.

2.5 Post EC treatment

After the coagulation and electrochemical reactions in the EC system the treated wastewater will require post treatment to remove the produced flocculated solids and provide a clarified effluent. Options include:

Clarification:

- simple sedimentation (clarifier) if the flocculated sludge from the EC unit settles well,
- · Floatation clarification (DAF) using the inherent hydrogen gas buoyancy from the EC unit,
- Media filtration (sand, multimedia) following the primary floc removal step,
- Direct mechanical sludge separation (centrifugation).

A review of literature available from EC supplier websites indicates that utilisation of the hydrogen gas evolution from the EC unit cathode to assist with the floatation of the sludge is commonly applied in an integrated EC – floatation treatment step. The need for post filtration following an EC – floatation step depends to the desired quality of the final effluent. For the Taipa discharge to wetlands or irrigation it is unlikely that total clarification of the effluent would be required.



EC at Taipa WWTP

Dewatering

Following clarification, the sludge can be dewatered for disposal. Typically this would be by mechanical dewatering by;

- Centrifuge this may also be used as the primary clarification step with appropriate equipment selection.
- Belt press
- Screw press
- · Filter press

Disposal of the sludge will need to consider the Ministry of Health guidelines to identify the appropriate method and location to meet sanitary requirements.

2.6 Commercial EC

Internet search results suggest that there are relatively few electrocoagulation equipment manufacturers globally, however there are over 20 water treatment suppliers identified who offer integrated wastewater treatment solutions using original EC equipment from manufacturers. The following manufacturers of EC plant are noted, although it is not a definitive list:

- Powell Water Systems USA
- Boydel Canada
- WaterVision Inc USA
- Watertectonics Inc USA
- Kaselco (Baker Corp) USA
- Samtech Pty Australia
- Aqualogy Spain (now part of Suez)

The majority of EC installations referenced by the suppliers are for industrial wastewater. While several bench scale tests on municipal domestic wastewater are reported in literature there are few larger scale applications reported. The applications appear to be used for small scale, decentralized municipal domestic sewage treatment. Powell Water Systems refer to trials undertaken on Publicly Owned Treatment Works (POTW) plants and provide results in a technical bulletin⁴. The results appear to be from a pilot study not a full-scale operation.

We are not aware of any municipal wastewater treatment systems using electrocoagulation in New Zealand.

3 EC at Taipa WWTP

3.1 PWS EC Equipment

The FNDC proposal offer by Mr Kurmann is based on the Powell Water Systems (PWS) technology. The pilot test unit used by NIWA for bench testing was supplied by PWS.

As a supplier of electrocoagulation systems, PWS has been in the marketplace since circa. 2000 and would be considered a mature and reputable company. PWS holds a patent (Issued 2002) for the specific configuration of the electrode plates and the power supply arrangement of their equipment which claims to

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⁴ Powell Water Systems Inc. Technical Bulletin Copyright 1994 - 2001.

Location of EC at Taipa WWTP

provide an efficient and effective EC treatment process. Their primary configuration of vertical electrode plates is arranged to provide a water flow path that permits co-movement of the coagulated waste and the generated gas bubbles to minimise potential fouling of the inter-plate space. This configuration permits close spacing of the electrodes allowing the use of a simple power supply system, increasing efficiency and reducing cost.

As noted in the NIWA report (Section 7.3) PWS have commercial-scale EC equipment with a treatment capacity up to 2750L/min. For the full-scale plant Mr Kurmann proposes a PWS EC500 process unit with a nominal treatment capacity of 50m³/h. This is sufficient to accommodate the consented average daily flow of 790m³/d (33m³/h) from the Taipa WWTP plus a peak wet weather flow to 1200m³/d. Mr Kurmann has provided a budget capital cost for the PWS EC500 unit alone of \$950,000. The cost does not include design, site development, power supply and additional costs for sludge storage thickening or dewatering.

The basic EC unit offered (as per website details) does not appear to have any integrated solids removal processes so additional downstream equipment is required. Bench-scale EC trials by Mr Kurmann (submission to Taipa WWTP consent hearing 2019) provided photographs of algal sludge settlement after 5 minutes and 4 hours. The sludge appeared to have settled well, indicating that a simple clarifier may be effective for solids removal. EC trials carried out at NIWA laboratory (NIWA report) show a similar effective settlement. Quantification of the sludge volume relative to the quantity of wastewater treated is not given in the results.

However, relatively little further detail on the actual PWS EC equipment and sludge management equipment has been provided. Additional information has been sought from Mr Kurmann.

This information was received in August 2020 subsequent to the writing of the main report and is provided in the Appendix with additional commentary where appropriate.

3.2 Other EC equipment suppliers

EC equipment by other manufacturers use a variety of electrode and reactor configurations. Each claim to have an advantage in terms of power efficiency, electrode replacement etc. It is beyond the scope of this report to evaluate alternative suppliers and equipment. It is noted a number of suppliers offer EC treatment units that are integrated with a flotation-clarification step using the evolved gasses from the electrolytic action of the EC cell. There appears to be some merit in this approach in terms of sludge separation efficiency and equipment configuration.

Complete containerised EC treatment units are offered by some suppliers, including sludge removal, effluent filtration and laboratory space. This concept may be of interest to FNDC as it possibly obviates the need for buildings and other infrastructure.

4 Location of EC at Taipa WWTP

Within the Taipa treatment plant process there are potentially three process locations where the EC treatment could be applied, as shown in Photo 1;

- 1. Between basins 2 and 3,
- 2. The overflow of basin 3 to the maturation pond,
- 3. The overflow of the maturation pond to the wetland.



Location of EC at Taipa WWTP



Photo 1: Taipa WWTP configuration (from A. Kurmann evidence to Hearing Commission July 2019)

Mr Kurmann has provided information to the Hearing Commission on EC bench tests he has carried out on the discharge from locations at the WWTP. Reference is made to samples from the "settlement pond", unfortunately is unclear whether this relates to location 2 or location 3.

Treatment of the discharge from basin 2 (location 1) would place the highest load on the EC system and would require the highest peak flow processing capacity due to the limited upstream hydraulic buffering. The EC performance would need to perform with a high inlet quality variability from the aerated treatment process (basin 1) and settlement (basin 2). EC in this location would have a limited contribution to the quality objectives of the final effluent as the following downstream treatment (basin 3 and maturation pond) will still contribute changes to the final effluent quality from continuing biological and wildlife activity.

Placing the EC system at the overflow from basin 3 to the maturation pond (location 2) would allow treatment of a reduced load with respect to the location 1 load but will still require a greater peak flow processing capacity as the hydraulic buffering of the small upstream basins is limited. Discharging EC treated effluent into the maturation pond will still allow subsequent changes to the final effluent quality due to additional biological growth in the pond and the impact of birds and animals on the microbiological quality.

The most effective location would be where the concentration of contaminants is lowest from the existing treatment processes and the least load is applied to the EC system. The overflow from the maturation pond (location 3) is considered the best location as the contaminant load is lowest and the buffer volume of the maturation pond smooths flow and quality variability and allows for a consistent water quality to be applied to the EC system. The peak flow requirement of the EC equipment is reduced at this location. The maturation pond primary contaminants will be algae solids, dissolved nitrogen (ammonia, nitrate) and phosphorus. Bacterial concentrations will be reduced due to sunlight disinfection in the pond and would be expected to be the lowest in existing treatment process sequence. The effluent quality from an EC system installed at this location would have the greatest flexibility for final disposal, either to the existing wetlands or to a land irrigation scheme.

Under maturation pond conditions the EC system can be optimised to address the contaminants of concern while producing the lowest quantities of sludge for disposal, consisting primarily of algal cells and hydroxide flocs from EC electrode reactions. Options for sludge removal could include settlement clarification or DAF. Mr Kurmann proposed a centrifuge for sludge thickening to ~20% solids for disposal, with a budget capital cost of \$200,000. Without data to confirm the inlet solids concentration to the centrifuge it is not possible to assess the expected performance.



Operational requirements

Beneficial use of the dewatered solids as a fertiliser or soil conditioner will depend on the composition of the organic matter (mainly algal cells) and the residual concentrations of metal flocs from the electrode. The use of iron electrodes is less likely to create residual limitations in the soil. Residual aluminium in the sludge from the use of aluminium electrodes may limit the land application rates. The economic viability of beneficial sludge reuse would require further investigation, including compliance with Ministry of Health requirements for wastewater sludge disposal.

Disposal of sludge from the EC process into the basin 2 settlement pond has been suggested as an alternative to landfill or land disposal. Accumulated sludge would be removed with the periodic desludging every 8 to 10 years. The idea is attractive as the expense of dewatering the EC sludge on a continuous basis is avoided. The rate of sludge accumulation and the impact of metal coagulant on the basin performance would need to be evaluated.

5 Operational requirements

The following preliminary assessment considers the installation of a PWS EC treatment process and ancillary sludge handling equipment at the Taipa WWTP site to treat wastewater from the existing maturation pond outlet for discharge to the existing wetland and Parapara Stream system or to a land irrigation disposal scheme. This is based on information provided by FNDC, submissions by Mr Kurmann to the Resource Consent Hearing and the bench scale testing by NIWA.

1. Iron or aluminium electrodes

As noted in section 2.3.1, while both aluminium and iron electrodes are capable of flocculating algae, the use of aluminium electrodes is favoured for algal removal. The PWS EC bench scale unit used iron electrodes for cathode and anode. It is assumed that the full-size EC equipment would also use iron – iron electrodes.

2. Power demand

The power consumption of the EC process will depend on the voltage and current settings used, the area of plates and the conductance of the liquid. The NIWA EC bench trials measured a power consumption range of 0.26 - 1.52 kWh/m³ across 3 trials at various current densities. Literature values range from ~0.9 - 2.5kWh/m³ for algal removal depending on the evaluation conditions.

Using a moderate power demand of 1.0kWh/m³, the EC treatment of 790m³/d ADWF would require 790kWh/d. For an energy tariff of \$0.30/kWh the annual EC power cost would be \$86,000. Mr Kurmann estimated an annual power cost of \$73,000. This does not include the additional power demand associated with pumping wastewater through the EC unit, sludge dewatering and handling or other ancillary power consumption. It is not possible to assess these additional demands with the current information available but a provisional site electrical allowance of up to 70kW would not appear unreasonable.

By comparison, a modern, high rate, nitrifying activated sludge process uses about 0.9kWh/m³ in total for pumping, treatment, UV disinfection and sludge dewatering

It has been suggested that solar photovoltaic power could be used to offset the energy consumption from the grid. Assuming that solar PV power would be available for 8 hours per day (averaged over the year) a PV system to power the EC unit alone for this period would need an installed capacity of at least 35kW (~120 panels with total area ~200m²). Additional PV capacity would be necessary to meet the total daily power demand of the treatment system. Battery storage of sufficient capacity to operate the plant at night or for any sustained cloudy period would appear to be in the order of



Summary

400kWh. This is a large battery installation and would require additional PV capacity to charge during the day. It is unlikely to be economically viable. A more detailed analysis of the power demand and solar PV capacity would be needed to examine the business case for economic viability and carbon footprint.

3. Electrode life and replacement

The operational life of the electrode stack has been estimated by Mr Kurmann as 6 – 8 weeks based on a nominal Fe dose of 25mg/L. The simplicity of electrode replacement for the EC500 unit is not provided in detail but Mr Kurmann notes that replacement of the iron plates would take 1 to 2 hours. Depending on the specification and shape of the plates it is assumed that the plates could be sourced locally. In his answers to the consent hearing (July 2019) Mr Kurmann notes the annual cost estimate for electrode replacement would be \$14,900. It is not stated if this includes site installation.

4. General operational requirements

The EC unit should require relatively low operator attendance as the electrical control is automatic. A daily check is suggested by Mr Kurmann. Management of the sludge removal system (two-way dewatering centrifuge) and would require additional operator input. This additional time is not quantified. An annual operator cost of \$8,500 has been suggested by Mr Kurmann. The number operator hours per week is not stated.

6 Summary

The current assessment of electrocoagulation technology and the applicability of an EC treatment plant for the Taipa East Coast Wastewater Scheme has been based on information provided by FNDC, Mr Kurmann and a report on electrocoagulation by NIWA. Additional information was drawn from the Resource Consent Hearing evidence and publicly available resources on the internet.

The key observations from the review are:

- The electrocoagulation process is a mature treatment technology based on the electrolytic liberation of soluble metal ions from metallic plates to provide coagulation of the wastewater stream. In addition to the liberation of metal ions there are a number of electrooxidation reactions that produce oxidants (hydroxide radicals, hypochlorite) that enhance the reduction of contaminants. Several commercial suppliers of EC equipment are available, including completely containerised units. All are located internationally outside of New Zealand.
- EC has been successfully applied to a variety of commercial full-scale industrial applications. It is less frequently applied to municipal wastewater treatment, particularly at larger scale where it is less economic than conventional treatment processes. We are not aware of any EC treatment plants in New Zealand treating municipal wastewater.
- 3. The specific application of EC to the Taipa Wastewater Scheme has been considered as a concept proposal based on treatment of the wastewater from different locations within the existing pond system. The preferred treatment location would be the effluent discharge from the final maturation pond. This location is considered to apply the lowest organic load to the EC process, consisting primarily of algae solids, and to make most use of the maturation pond volume for peak flow buffering.



Summary

- 4. Testing of EC treatment of algal pond effluent reported by NIWA and similar tests by Mr Kurmann has shown that a good-settling sludge can be obtained that would favour a simple clarifier for post treatment. Thickening of the sludge by centrifugation for disposal is considered by Mr Kurmann, although little detail of the equipment is available. The quantity of sludge produced has not been identified. The potential of sludge disposal to the existing settlement pond is an option to reduce dewatering costs.
- 5. The effluent quality from the EC process is required to meet the discharge criteria set out in the Resource Consent conditions. The performance of the EC process in terms of effluent suspended solids, BOD/COD, phosphorus, heavy metals and microbiology is considered likely to be adequate to meet the consent conditions. The ability of EC to meet the ammonia limit of <10mgN/L is less certain as removal rates of 50% 80% may not be sufficient, given the relatively high inlet ammonia concentrations reported.</p>
- 6. Capital and operating costs are difficult to determine from the available information specific to the Taipa WWTP proposal as no actual equipment specification has be provided. Mr Kurmann has given a budget cost of the EC unit as \$950,000 and a cost of \$200,000 for the sludge dewatering centrifuge. Costs for the balance of plant, e.g. pumping, power supply, civil works, buildings etc. are not provided and would have to be estimated.
- 7. Power consumption has been estimated from NIWA test results and typical literature values for EC operation. A typical reported value is of the order of 1kWh/m³ treated. For the Taipa WWTP consented design average flow of 790m³/d a power demand of approximately 790kWh/d could be typical. At design flow this is an annual cost of some \$83,000. Power costs would be lower at the inception of the scheme with lower flows.
- 8. While solar PV could be an option to offset the daily power demand it is unlikely that the cost of a battery system to cover night time and cloudy periods would be viable. Further financial analysis would be required to define CAPEX and operating return.
- 9. Other operating expenses relate to the periodic replacement of the electrodes (6 8 weeks) with an estimated cost of \$14,900 pa and an operator expense of \$8,500 pa (data from Mr Kurmann).
- 10. The current information provided on the detail of the proposed EC treatment process for the Taipa WWTP is insufficient to assess whether the process will be economically viable for the improvement of the effluent for discharge to the stream or for irrigation.

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Summary

Information from Mr A. Kurmann

An email information request was made to Mr Karmann on 23rd September 2019 for clarification and additional information on his proposal for EC treatment at Taipa. Further telephone contact was made with Mr Kurmann on 25th June 2020 to request an update on the supply of information.

Information was received from Mr Kurmann by email on 3 August 2020. Five items were provided:

- 1. EC Trial TWWP AK.pdf
- 2. Final FNDC Electrocoagulation report.pdf
- 3. Electrocoagulation-is-it-cost-effective-for-Wastewater-Treatment-NIWA-2019.pdf
- 4. Sewage Hydro OK.pdf
- 5. Worksheet in EC trial TWWP.xlsx

Items 2, 3 and 4 appear to be information previously presented in evidence at the NRC Resource Consent Hearing in 2019. They contain no new information and have already been commented upon in the body of the Beca report.

The EC Trial TWWP report (item 1) dated July 2020 provides an update on the previously submitted information with additional testing of the Taipa wastewater using an alternative small EC unit (Maurilogical) and a small commercial EC unit (Maurilogical). The Worksheet (item 5) contains the laboratory test results for 3 sampling periods undertaken after the consent hearing evidence presentation, viz June 2019 (4 results), December 2019 (2 results) and May 2020 (4 results). Samples were taken from the settlement pond, which is Location 3 in the Beca report.

Removal Performance

The EC Trial TWWP report details additional performance information based on the testing of the Maurilogical EC unit. A table of % removal performance is provided. It is not possible to establish the correlation between table removal values and the sample analysis results given in the spreadsheet as the report table samples are unidentified.

Analysis of the results for the Murological EC unit indicate significantly different inlet quality for the 3 sampling periods. June 2019 results show high ammonia and low nitrate concentrations, whereas the December 2019 show a lower ammonia and higher nitrate. The May 2020 test results refer to a <u>Vortex</u> treatment (undefined in the EC report) which results in very low ammonia (0.1mg/L) and high nitrate (261mg/L). It is presumed that the Vortex treatment is some form of aeration/biologic treatment to reduce the ammonia to low levels.

Sample	EC influent ammonia concentration mg/l	EC effluent ammonia concentration mg/l	Ammonia removal %	Nitrate removal %	Phosphate removal %
June 2019	72	27 - 28	61% - 63%	44% - 49%	97%
Dec 2019	21	1.8	91%	77%	99%
May 2020	2.7	0.3	89%	56% - 59%	96%

The based on the data provided the calculated Maurilogical EC performance for these periods is:

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Electrocoagulation Wastewater Treatment | 6515241 | NZ1-16515038-2 0.2 | 20 August 2020 | 14

Summary

		75%	>80%	>95%
Average		1070		
values queted				
values quoted				
in EC report				

The ammonia % removal performance is similar to the values noted in the Beca report and correlates with the influent concentration where lower removal occurs with the higher ammonia. Note that the discharge consent condition has a maximum of 4 samples per year allowed to exceed an ammonia concentration of 15mg/L. The measured EC performance for June 2019 could breach this limit if a sustained period of high influent ammonia occurs. The nitrate and phosphate % removal values are consistent with the Beca main report.

The report makes reference to a Vortex trial which purports to reduce the ammonia concentration by conversion to nitrate. No details of this process are provided. The wastewater sample (27/5/2020) was treated for 24 hours by this process with a resultant residual ammonia concentration 0.1mg/L. The pond overflow inlet sample contained 2.7mg/L ammonia, which is not a particularly challenging input to the Vortex trial to determine efficacy.

Sludge management

Additional information of options for clarification of the EC effluent to remove the flocculated sludge have not been advanced. It is suggested that the sludge could be beneficially reused as a fertiliser. As the sludge is associated with sanitary wastewater treatment the national biosolids guidelines will determine the acceptable reuse requirements.

Operating costs

The EC report has provided revised estimate figures for power consumption and electrode consumption. The power consumption is estimated at 0.75kWh/m³ treated. The power rate is quoted at \$0.18/kWh. The power cost will vary with the expected wastewater flow and the electricity rate. The EC report estimates an annual power cost of \$27,000 based on a flow rate of 200,000m³ (~550m³/d). Note this is not the maximum permitted flow of 790m³/d.

The cost estimate used in the Beca report is 1.0kWh/m³ with a nominal power rate of \$0.30/kWh.

An estimate of the electrode consumption has been provided in the EC report based on an equivalent Fe dose of 23.7g/m³ and a flow of 200,000m³/d. A total annual consumption of 4740 kg/annum at a cost of \$2/kg for iron plate giving an estimate electrode replacement cost of \$9,855 per annum. It is not stated if this cost includes fabrication of the electrode stack and site replacement.

The equivalent Fe consumption rate in the Beca report was 25g/m³ with a rolled steel plate cost of \$1.70/kg.

CAPEX

No additional information on the cost of the EC unit and ancillary equipment has been provided. The proposed EC equipment vendor has been changed from Powell Systems (due to excessive capital cost) but no specific alternative vendor has been identified. The previous capital estimate for the EC unit was \$900,000. No new costs are given. Sludge dewatering by centrifuge or co-settlement in the existing pond is proposed. No additional centrifuge costs are provided. The previous centrifuge cost estimate was \$200,000.

Commentary

The EC report has added some additional information based on further testing, however there is no substantial change from the data available at the time of the consent hearing. The key effluent quality performance of ammonia removal and power costs, electrode costs and solids dewatering equipment are still unresolved.



Electrocoagulation Wastewater Treatment | 6515241 | NZ1-16515038-2 0.2 | 20 August 2020 | 15

Summary

Beca considers there is still insufficient information provided by the additional reporting to allow a considered evaluation of the EC process as a viable treatment strategy for the Taipa Wastewater Treatment Plant able to meet the discharge resource consent conditions.

The EC report recognises that the treatment trials to date are based on a batch treatment process and that a pilot trial with continuous flow is required to fully define the performance and operating parameters. If FNDC wish to pursue electrocoagulation as a potential treatment solution it is recommended that continuous pilot trial is considered. It will be important to develop a comprehensive and detailed implementation pilot testing programme to ensure that all the critical parameters are quantified and a robust cost benefit analysis can be completed.



Electrocoagulation Wastewater Treatment | 6515241 | NZ1-16515038-2 0.2 | 20 August 2020 | 16

5.2 NORTHLAND CDEM GROUP DROUGHT PLAN 2020-2021

File Number:	A3051704
Author:	Tania George, EA to GM - Infrastructure and Asset Management
Authoriser:	Andy Finch, General Manager - Infrastructure and Asset Management

PURPOSE OF THE REPORT

To present the Northland CDEM Group Drought Plan 2020-2021.

EXECUTIVE SUMMARY

This is version 3 of the Northland CDEM Group Drought Plan 2020-2021. This plan has been adjusted based on feedback received from stakeholder consultation. And was approved at the Northland CDEM Group Coordinating Executive Group (CEG) meeting on 18 November.

RECOMMENDATION

That the Infrastructure Committee receive the report Northland CDEM Group Drought Plan 2020-2021.

BACKGROUND

In early 2020 Northland experienced one of the most severe droughts on record. Rainfall across Northland during 2019 was at record low levels, and with the lack of rainfall during the summer of 2019/20 severe drought resulted across the entire Northland region.

DISCUSSION AND NEXT STEPS

This is a living document and will be updated as information becomes available (i.e. NIWA updates / additional information from stakeholders) and will be re-circulated as required when significant updates are added.

FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

Nil

ATTACHMENTS

1. Attachment 1 - Northland CDEM Group Drought Plan 2020-2021 V 3.0 - A3051701 🗓 🛣



Northland Civil Defence Emergency Management (CDEM) Group

Drought Plan

2020 / 2021 Version 3.0

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Version Control

Date and Version	Change Made	Reason
6/11/2020 V 2.0	Additions from external agency feedback	Consultation with agencies
18/11/2020 V 3.0	Updating the responsibilities section for DHB, DOC	Consultation and feedback from agencies

Northland CDEM Group Drought Plan 2020

ID: A1380283

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Situation

Background

In early 2020 Northland experienced one of the most severe droughts on record. Rainfall across Northland during 2019 was at record low levels, and with the lack of rainfall during the summer of 2019/20 severe drought resulted across the entire Northland region.

This prolonged drought and lack of rainfall impacted adversely on ground and surface water, resulting in adverse impacts for water suppliers, dairy farmers, sheep and beef farmers, horticultural operations, growers and producers, industry, government facilities and communities. Those who were reliant upon rainfall to replenish drinking and other water supplies were all adversely impacted.

Alternate and emergency water supplies were commissioned in Kaikohe, Kaitaia and Rawene. Emergency tanks were established, and action taken to ensure that community buildings and Marae were able to have immediately available supplies of water for emergency purposes in the event that communities required it. Caches of water in small containers for immediate delivery were also established at strategic locations and in some instances distributed. The Northland Regional Council Water Shortage Directions were issued to allow the taking of water below permitted consented levels in catchments (bores and rivers).

Alongside the district council response, the Northland CDEM Group coordinated a region wide response. Over 350 tanker deliveries of water were made to residential dwellings, additionally Ministry of Social Development funded over 1500 deliveries of water on top of the usual commercial water carrier deliveries.

District Council's imposed water restrictions up to Level 4 in some areas of Northland and took steps to proactively manage water supplies to ensure that communities were able to access potable water and no reticulated water systems in Northland failed.

Current Situation

The current NIWA Seasonal Climate Outlook** November 2020 to January 2021 confirms *La Niña* * conditions and a north-easterly airflow. Rainfall totals are most likely to be near normal in the north and east of the North Island and temperatures are likely to be above normal.



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Northland CDEM Group Drought Plan 2020



The table below shows the probabilities (or percent chances) for each of three categories: above average, near average, and below average for Northland between November 2020 and January 2021.

	Temperature	Rainfall	Soil moisture	River flows
Above average	75	30	25	25
Near average	20	40	25	25
Below average	05	30	50	50

- Temperatures are very likely to be above average (75% chance).
- Rainfall totals are most likely to be near normal (40% chance).
- Soil moisture levels and river flows are likely to be below normal (50% chance).

**NIWA publish a seasonal climate outlook each month for the following three months. This information can be updated as the outlook is updated.

* La Niña means "the little girl" in Spanish and is a phase of a naturally occurring global climate cycle also known as "the cold event". La Niña events have different impacts on New Zealand's climate. More north–easterly winds are characteristic, which tend to bring moist, rainy conditions to the north–east of the North Island, and reduced rainfall to the south and south–west of the South Island.

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Intent

The intent of this plan is to provide a coordinated and coherent across agency readiness and response framework for a future drought in Northland.

This plan is based on the learnings from the response to the drought in 2019/2020. To mitigate future water shortage situations a coordinated and coherent response is required across agencies, organisations and stakeholders alongside cooperation and readiness from the wider community.

This plan sets out the roles and responsibilities of agencies, organisations and stakeholders in relation to water management during a drought response and includes references to emergency reticulated water supplies, rainwater tank supplies and other ground water and surface water sources (including bores, rivers and springs).

A joint agency approach to timely and accurate public communications and education is a high priority. Timely messaging and public information may assist in mitigating the speed at which the development of water shortages during the summer season may occur.

Water storage and limiting water use will also mitigate the development of water shortages. This joint approach and collaboration should continue through a water shortage situation to address issues, provide information to the public and avoid increasing the severity of the situation.

The plan sets out potential water shortage scenarios for the Northland region based on previous experience. The scenarios assist with understanding how the roles and responsibilities of agencies, organisations and stakeholders fit into any water shortage related activities and any related emergency response.

Planning Factors

- The Northland CDEM Group role is mandated by the CDEM Act 2002 to coordinate the response during an emergency. The Act defines an emergency as any event which may cause loss of life, injury, illness or distress and cannot be managed by emergency services or requires a significant coordinated response. The Northland CDEM Group does not have a role in business as usual (BAU) activities of water supply management.
- Public water supplies and providing alternate or emergency supplies is the responsibility of the respective councils and water suppliers.
- The activation of an emergency response by the Northland CDEM Group will not occur until an emergency situation has been reached, this will be indicated by the occurrence of the triggers (as outlined in the Triggers section). If a CDEM Declaration of a local State of Emergency is required, this will be decided by the Northland CDEM Group Controller using situational awareness and intel. An emergency response from Northland CDEM can be initiated when a Declaration is not required.
- CDEM do not have access to additional water supplies

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Northland CDEM Group Drought Plan 2020

- CDEM do not have additional funding to support failing infrastructure
- CDEM do not have additional access to water delivery systems
- Councils will act and deliver on their water management plans and implemented as funded through their Long-Term Plan process.
- Businesses, schools and specific self-supplies should have appropriate business continuity plans in place and the ability and capability to activate them to manage water shortages and other impacts.
- An expectation that agencies, organisations and stakeholders will carry out their mandated BAU responsibilities.
- Agencies, organisations and stakeholders will initiate early collaboration and cooperation to formulate consistent joint-agency public information and disseminate through their usual communication channels.

Triggers

There are several information sources which can provide an overall picture of the water situation across the Northland region. Information is used for decision making to trigger actions relating to water shortages. Information used to trigger certain actions include:

Information source	Trigger point for action
- NIWA Drought Index and NIWA Seasonal Climate Outlook	A reading of very dry / extreme outlook for the region
- Metservice Weather Outlook	Outlook forecasts extreme dry conditions for the region
 Northland Regional Council hydrological data 	Water levels are approaching minimum allowable levels for water takes.
- Ministry for Primary Industries (MPI Drought "Event Classification") Minister for Primary Industries classifies that the region is in a medium scale a drought impacting significant parts or all of the region.
- District Councils imposing water restrictions	Combinations of water restrictions at Level 3 and 4 affecting parts or all of the region.
 Intelligence reporting from agencies organisations and stakeholders on water shortage impacts in the regior 	large numbers of people in parts of the

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Northland CDEM Group Drought Plan 2020

<u>Risks</u>

Risks associated with water shortages in the region have been identified in the list below, raising awareness to agencies, organisations and stakeholders to take into consideration in their planning and readiness and response activities. Agencies, organisations and stakeholders should undertake mitigation activities in relation to identified risks where possible, to reduce the impacts of water shortages in the region.

- Public expectations for information, continuous safe supply of drinking water
- Political pressure
- Availability of timely, accurate and informative public information through various channels
- Cooperation, capacity and capability of agencies, organisations and stakeholders
- Commercial water carrier wait-times for water deliveries
- Time taken for water suppliers / water carriers to address statutory requirements as advised by Public Health Units Drinking Water Assessment Unit.
- Disease outbreaks due to no water available for sanitary services for rural communities on tank water or contaminated water supplied to communities through temporary water supplies / water carriers.
- Northland tourism operators water usage
- District Council engagement and responsibilities for residents on rainwater tank supply in their district
- Increase in tourists in Northland this summer (NZ holidaying in NZ)
- Large public events and water usage
- State Highway One (SH1) Mangamuka no access to the Far North until road repairs are complete.
- Maintaining sufficient resources capability
- Concurrent emergency responses activities
- Competing work priorities at the time of dealing with water shortages, pandemic, cyanobacterial blooms in water sources etc.
- Restrictions in place on water takes due to low water table levels.
- Major infrastructure failure to more than one reticulated water system at the same time
- Extreme weather conditions beyond initially forecast
- Contamination of source of a water supply

Communication

Early and clear communication between agencies, organisations and stakeholders is necessary when any risk of a water shortage increases.

Early public information and education is a high priority. Significant water savings were made by various communities when public messaging sought community cooperation to make water savings and conserve water in preparedness.

The Northland CDEM Group Public Information Manager, in collaboration with relevant agencies, councils, organisations and stakeholders, will coordinate the public education themes to ensure consistency of information. The themes, mechanisms of publication and the target audience will be identified, and consistent common messaging distributed.

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Northland CDEM Group Drought Plan 2020

It is essential that all agencies, organisations and stakeholders effectively communicate, and across-agency engagement occurs throughout the summer season to ensure consistent messaging and delivery to the community in a timely manner.

Roles and Responsibilities

The generic across-agency responsibilities outlined below are expected to be undertaken **during readiness and response** by each of the agencies, organisations and stakeholders mentioned in the following table:

- Solving, management and planning to mitigate water shortage issues within their own business structures before escalation occurs
- Promoting water conservation messaging and arrangements internally for the organisation, agency or business and externally with their public facing services with the community.
- Reasonable intelligence gathering and reporting on water shortages as requested.

Role	Responsibilities
Role Northland Civil Defence Emergency Management (CDEM)	 Readiness and Response Across-agency coordination and collaboration to ensure a coherent approach during readiness and response phases. Compile and disseminate to stakeholders, a 4Ws document (as used during COVID response) with the Who, What, When, where of water carriers and water infrastructure providers, agencies, organisations and stakeholders who can give support during a water shortage. Provide coordination for across-agency early public education and information on water usage and saving, including public information on the water situation as required (for a single point of truth). Engage with CDEM stakeholders regarding Business Continuity Plans (BCP) and Councils for water management plans for water shortages. Engage with commercial water carriers regarding their BCPs (trucks, drivers, access to water collection points) Manage the National Emergency Management Agency
	(NEMA) central government funding for emergency water provision and manage the claims process for reimbursement of funds through NEMA.

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Northland CDEM Group Drought Plan 2020

	- Liaise with CDEM stakeholders during any water shortage situations.
	- Work alongside the Ministry of Social Development with needs assessment and funding for the provision of drinking water to the community
	- Deliver strategic communications to CDEM Governance, district Mayors and Chair of the regional council and community leaders
	- Prompt agencies, organisations and stakeholders from the reduction, readiness, response and recovery aspects of a drought or water shortage situation.
Ministry of Social Development (MSD)	Readiness and Response - Providing financial support to their clients for the provision of water and water related expenses (including tank cleaning, water deliveries and water infrastructure repairs).
	 Carry out needs' assessments for people who have water shortage issues
	 Allocate financial assistance as determined by needs assessment from both MSD and CDEM funding
Northland District	Readiness and Response
Health Board (DHB) and Public Health	 Manage and care of dialysis patients in the region
	- Ensure District Hospitals water supplies are not restricted to the point of endangering patients.
	- Contribute to public education on drinking water quality
	 Provide guidance to water suppliers on Health Act requirements relating to provision of safe drinking water.
	- Approve and issue temporary drinking water supplies for water carriers and sources for restricted supplies
	 Investigate waterborne infectious disease outbreaks, insanitary conditions in communities due to no water availability or due to consumption of contaminated water supplied by a temporary water supply.
Ministry of Education	Readiness and Response
(MoE)	- Oversee schools drinking water access and availability.
	 Anticipate requirements and develop plans and put contingencies in place for the provision of water.
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Northland CDEM Group Drought Plan 2020

Northland RuralRemind agricultural, horticultural, forestry and rural industry sectors regarding their arrangements to manage water shortages in the summer.Support Trust (RST)Remind agricultural, horticultural, forestry and rural industry sectors regarding their arrangements to manage water shortages in the summerLiaise with Ministry of Primary Industries (MPI) in regard to provision of support and resources available to small block holders and to monitor potential animal welfare issues that may arise.Ministry of Primary Industries (MPI)Assess and determine if a drought classification is required for the regionProvide supportive resources for the rural sector and primary producers (including feed budgeting, assisting with sourcing stock feed, provide funding where applicable)Provide animal welfare oversight and support when issues arise.Department of Internal Affairs (DIA)Provide education on water saving and securityNorthland Regional Council (NRC)Provide education on water saving and security-Nonitor and report on ground-water and surface water levels Issue Water Shortage Directions (WSDs) as required in a timely manner-Process resource consents where required in a timely manner Utilise the NRC Regional Drought Plan for Regulatory Response / Compliance purposesIdentify, monitor and respond to risks to drinking water supples taken from ground-water and surface water e.g. saltwater intrusion into aquifers and cyanobacteria blooms in	Mauthland Dunal	
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8	District Councils Far North District Council (FNDC)	 Issue Water Shortage Directions (WSDs) as required in a timely manner Process resource consents where required in a timely manner Utilise the NRC Regional Drought Plan for Regulatory Response / Compliance purposes. Identify, monitor and respond to risks to drinking water supplies taken from ground-water and surface water e.g. saltwater intrusion into aquifers and cyanobacteria blooms in surface waters). Readiness and Response In a CDEM role, provide emergency water supplies to the community where required. <i>E.g. in the form of tank farms and bottled water as required if public water supply is interrupted.</i>

Northland CDEM Group Drought Plan 2020

Kaipara District Council (KDC)	 water carriers for accessibility and infrastructure requirements if required or provide water tankers and bottled water in communities for an emergency water supply if required. Use council water management plans in an effective and timely manner (i.e. early intervention to reduce large scale non-essential water usage). Manage council reticulated water supply demand and water restrictions as required Plan and provide extra tap stands' / filling stations and access for commercial water carriers as required, where there is an appropriate source. Monitor and manage district council water supply infrastructure to reduce water loss.
Department of Corrections	Readiness and Response Implement business continuity plans for water shortages for
Corrections	its facilities.
Water Infrastructure Contractors	Readiness and Response Provide personnel and parts to check and repair water
	infrastructure as required
Te Puni Kokiri (TPK)	Readiness and Response - Provide funding where available for water infrastructure at a community level - Provide education on: Water saving and security Accessing available funding for water deliveries and water infrastructure repairs Advice for landlords and tenants on water shortages in rental accommodation
Te Kahu O Taonui (TKoT) Iwi and Hapu representatives	 Readiness and Response Provide public education on: Water saving and security Accessing available funding for water deliveries and water infrastructure repairs Advice for landlords and tenants on water shortages in rental accommodation Support Iwi with water shortage issues where required.
C	
Commercial Water Carriers	 Readiness and Response Prepare drivers, trucks and business continuity plans to meet water requests over the summer season.
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Northland CDEM Group Drought Plan 2020

	 Consider road access routes and road issues across the region that may impact their services.
	 Link with Councils for access to tap stands / water filling stations.
Fire and Emergency	Readiness and Response
New Zealand (FENZ)	 Forward plan for water sources for fire fighting purposes during water shortages
	- Identify strategic locations for transportable water storage tanks
	- Review Pre-determined attendance (PDAs) and add trucks and tankers if required.
	- Prepare media releases to minimise issues regarding the use and replacement of water for fire fighting
	 Plan and communicate arrangements for managing and suppressing a fire where there may be a shortage of water
	- Review the operational tactics to be used in a drought situation.
	- Have prepared fire appliance water capacity and water tanker travel time charts for all Northland zones.
	- Monitor and advise all stakeholders of changes to fire restrictions and bans.
Department of Conservation (DOC)	 Readiness and Response Plans for water provision, uses and restrictions for DOC visitor facilities across the region should water shortages occur.
	- Manage the welfare of protected species (e.g. kiwi)
Kainga Ora	Readiness and Response
itaniga ora	- Ensure tenants in Kainga Ora homes have access to water.
Other Water	Readiness and Response
Suppliers	 Manage relevant reticulated water supply demand and water restrictions as required
	- Monitor and manage relevant water supply infrastructure to reduce water loss.
	 Plan and prepare for water shortages in water supplies with business continuity plans

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Northland CDEM Group Drought Plan 2020

Appendix 1 Scenarios

Scenarios

1. 4,000 people without a reticulated water supply

<u>Scenario</u>

The public reticulated water supply in a single location of 4,000 people is interrupted with damage to infrastructure due to dry ground movement. The public water supply restoration time is known, meanwhile 4,000 people are without a reticulated water supply to their properties.

Or

10,000 people are without a public water supply when cyanobacterial blooms appear on one of the district councils supply dams that then produces cyanotoxins.

The relevant **district council** provides an alternate water supply *e.g. installs* sufficient Tank Farms and / or water collection points for people to collect a minimum of 25 Litres of water per person per day and the district council provides means for those unable to collect water from a collection point *i.e.* vulnerable sectors such as elderly, infirm and/or disabled.

Consideration could be given to tankers filling water treatment plants directly to serve a reticulated water supply. This is dependent on several factors including availability of tankers and accessibility to water treatment plants.

The **Northland CDEM Group Action Plan for Rural Water Provision** can be utilised to assist with the operation.

Possible Tasks

Water collection points can be set up at community buildings and Marae on rainwater tanks. **Commercial water carriers** may be required to fill Tank Farms.

In the absence of being able to set up a tank farm, **district councils** could position water carriers positioned in the community and / or bottled water supplied.

The **Northland District Health Board** (DHB) requires regular water quality testing of the Tank Farm supply. The DHB also manage their community outpatients on dialysis and any affected district hospitals.

Pre-planning is required by the district council to provide the volume of water required.

Kainga Ora provide information and support to the tenants in their properties.

The **Department of Corrections** (if affected) implement their pre-planned business continuity plans.

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Northland CDEM Group Drought Plan 2020

The **Ministry of Education** (MoE) implement their pre-planned business continuity plans

Fire and Emergency New Zealand (FENZ) activate their pre-planned water source plans for fire fighting in the affected area.

Businesses, organisations and agencies implement their pre-planned business continuity plans.

2. Three reticulated water supplies fail long term affecting 1,500 people

<u>Scenario</u>

Water restrictions have been in place for the last few weeks imposed by the district council due to dry weather and lowering river levels.

In anticipation of river levels becoming too low to provide a reticulated water supply, 3 tank farms have been set up in 3 locations by the **district council**.

The reticulated water supplies in all 3 locations are interrupted when river levels drop below the intake. There are now 1,500 people without a water supply to their properties over 3 locations.

Possible Tasks

Like scenario 1, water collect points are required to be activated and managed across the 3 locations and pre-planning by the district council is required.

In the absence of being able to set up a tank farm, **district councils** could position water carriers positioned in the community and / or bottled water supplied.

3. 150 people in a small remote rural community are running out of rainwater tank supply and some do not have finances to pay for a water delivery.

<u>Scenario</u>

Low rainfall amounts and temperatures 25+ degrees Celsius for the last 3 months have affected a small rural community of 150 people on rainwater tank supply. People are running out of water and supporting each other where they can.

Some people have ordered a truck delivery of water, but some residents do not have the finances for the high cost of delivering to a remote part of Northland (\$800+ per delivery) and will run out of water in the next week.

Public education and information to remote communities from agencies and organisations through various channels has informed residents to approach **Ministry of Social Development** (MSD) for a needs assessment for funds.

<u>Possible Tasks</u>

Te Kahu o Taonui (TKOT) work with Iwi organisations to ensure whanau can connect with support agencies, in particular those in more remote locations and limited connectivity.

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Northland CDEM Group Drought Plan 2020

MSD carry out a needs assessment and decide if funding can be provided to the caller from either MSD or CDEM for water delivery.

The caller also contacts **Te Puni Kokiri** (TPK) and the **Department of Internal Affairs** (DIA) to enquire about funding to improve water infrastructure at their property to assist with the collection and storage of water if issues have been identified in the collection of rainwater.

Some of the affected properties are farms and the increased stress accessing feed and water for stock requires support from the **Northland Rural Support Trust** (RST) and the **Ministry of Primary Industries** (MPI), especially access to feed and the provision of psychological support.

4. Coastal bores suffer saltwater intrusion and hundreds of people are affected around the Northland coastline

<u>Scenario</u>

Numerous properties at coastal locations rely on coastal bores for their water supplies. Ground water levels are so low, the risk of intrusion from salt water is becoming a threat and water usage needs to stop to save the bore from being permanently damaged.

Residents reduce the amount of water they are using through receiving information and updates from the **Northland Regional Council** who are monitoring ground water and surface water sources.

Some bores become contaminated with saltwater and can no longer be used, the **district council** provides water collection points where needed to assist people with their water supply.

Possible Tasks

MSD provide needs assessments and make decisions of funding available through MSD or **CDEM** for water provision (CDEM funding is only available if a CDEM emergency has occurred).

TPK and DIA may provide funding for long term water infrastructure to replace the need for using the contaminated bore.

Te Kahu o Taonui (TKOT) work with Iwi organisations to ensure whanau can connect with support agencies, in particular those in more remote locations and limited connectivity.

Department of Conservation (DOC) assess the use of their camp grounds.

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Northland CDEM Group Drought Plan 2020

5. Business and primary industry affected by water restrictions or no access water (people, business, animals).

<u>Scenario</u>

Businesses are forced to close due to no access to water. Some businesses have livestock that require drinking water and water to operate plant and machinery (i.e. dairy herd).

Support from a dairy company provides some livestock drinking water and dairy advisors provide on farm advice.

Possible Tasks

Rural Support Trust (RST) provides psychosocial support to farmers and links into financial, feed and water sources support.

The **Ministry of Primary Industries** (MPI) provide resources, links to potential funding streams and provides animal welfare advice and oversight.

The Northland Regional Council (NRC) would monitor ground water levels.

Water Contractors, if contacted, support farmers with setting up water storage facilities.

MSD carry out needs-assessment for the provision of financial support.

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Northland CDEM Group Drought Plan 2020

5.3 INFRASTRUCTURE AND ASSET MANAGEMENT MONTHLY BUSINESS REPORT FOR DECEMBER 2020

File Number: A3073355

Author:Tania George, EA to GM - Infrastructure and Asset ManagementAuthoriser:Andy Finch, General Manager - Infrastructure and Asset Management

PURPOSE OF THE REPORT

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

EXECUTIVE SUMMARY

The Infrastructure and Asset Management Update provides an overview of Infrastructure and Asset Management activity for the period of December 2020.

RECOMMENDATION

That the Infrastructure Committee receive the report Infrastructure and Asset Management Monthly Business Report for December 2020.

BACKGROUND

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

DISCUSSION AND NEXT STEPS

The information is attached in the form of a report.

FINANCIAL IMPLICATIONS AND BUDGETARY PROVISION

None

ATTACHMENTS

1. IAM Business Report as at 31 December 2020 FINAL - A3073628 🗓 🛣





Infrastructure and Asset Management

Monthly Business Report

DECEMBER 2020

HE ARA TĀMATA CREATING GREAT PLACES Supporting our people

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Far North Waters

From: ken Sent: Friday, January 15, 2021 9:03 AM To: Glenn Rainham

Glenn

Your team have once again flushed the sewer at the above address and hopefully this will resolve the problem. I want to pass on my praise of these gentlemen who showed the most professional attitude and expertise on all 3 occasions that they visited my abode, to deal with this unpleasant problem. Unfortunately, they were unable to totally guarantee that the problem will not re occur, as it appears that some third party (or parties) have flushed an unknown amount of debris into the line and until it is all accounted for, may continue to cause blockages. There would seem to be a need for some sort of educational thrust (pamphlet drop, news article ??) on the non-disposal of wet wipes, etc via the sewer system. Thank you and your team for the speedy response and I hope that this will be the last time I will have to call upon your services.

Ken

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CAPITAL SPEND ANALYSIS



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Capital Spend Analysis as at 31-Dec-2020

	YTD (\$000's)		Full Year (\$000's)							
LTP Group	YTD Actual	Commitments	LTP Budget	Carry Forward Budget	Total Annual Budget	Actual vs Budget %	Total Annual Forecast	Actual vs Forecast %	Forecast vs Budget %	Forecast vs Budget Variance
District Facilities	2,094	2,907	13,028	4,031	17,059	12.3%	28,746	7.3%	169%	11,687
Stormwater	795	134	1,179	666	1,844	43.1%	1,636	48.6%	89%	(209)
Solid Waste	16	87	325	96	421	3.8%	421	3.8%	100%	0
Wastewater	3,141	3,772	4,936	6,760	11,696	26.9%	11,552	27.2%	99%	(144)
Water Supply	1,234	2,044	4,495	2,054	6,549	18.8%	8,675	14.2%	132%	2,126
Roading & Footpaths	17,629	39,424	37,388	7,974	45,362	38.9%	64,133	27.5%	141%	18,771
IAM Total	24,909	48,368	61,351	21,580	82,931	30.0%	115,163	21.6%	139%	32,231
Environmental Management	592	984	0	1,914	1,914	30.9%	2,914	20.3%	152%	1,000
Governance & Strategic Administratio	2,177	1,507	2,334	1,952	4,286	50.8%	4,357	50.0%	102%	70
Customer Services	394	87	533	933	1,467	26.8%	1,557	25.3%	106%	90
Strategic Planning	0	-	0	0	0	0.0%	40	0.0%	0%	40
Other Total	3,163	2,578	2,867	4,800	7,667	41.2%	8,868	35.7%	116%	1,200
Total	28,071	50,946	64,219	26,380	90,599	31.0%	124,030	22.6%	137%	33,432

Comments:

The 'Total Annual Forecast' is what is expected to be spent by 30 June 2021.

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ROADING

To maintain the District's roading network in a satisfactory condition and in accordance with national safety and engineering standards.

EXECUTIVE SUMMARY

The final AMP document was submitted on 11th December 2020.

Implementation of the Okaihau-Kaeo-Waimate Speed Limit changes has been delayed by approximately 4 weeks (and potentially 2 months). The delay a result of supply chain issues of importing signs, sockets and posts from China.

Delivery of the Capital Works programme continues to progress well and, after some initial programme slippage against the original forecast in the first 3 months of the year, is on track for completion against the revised (increased total programme) forecast.

The Dust Suppression program was successfully completed in December noting that, since completion, a number of requests have been received from Customers whose roads weren't treated questioning why. Responses to these enquiries has required investment of significant staff time and effort.

The condensed summer traffic count programme commenced in late December 2020 and will continue into January 2021, with this captured information to provide a key component of updated data within the Dust Prioritisation Matrix.

The Hokianga Ferry service experiences significant pressure at this time of year and as a result the vessel operates continuously (known as shuttling) for long periods to reduce queue lengths and waiting time as much as possible. The operator also deployed a Traffic Management Plan including a temporary speed restriction to warn drivers and to mitigate safety issues as a result of queues.

As part of the continued preparation for a potentially dry summer and a subsequent increased in Unsealed Road RFS's, the Maintenance and Operations Team have developed an Unsealed Roads information sheets. These have been provided to FNDC's Comms (for proactive community messaging) and Customer Service teams (for consistent informed responses to enquiries).

The overall number of requests for service are trending down, towards the situation one year earlier. The month on month gap comparing the same months from 2019 has reduced by 23%. There remains room for improvement and the team are due to explore ways to review.

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2021/24 AMP DEVELOPMENT PROGRESS

The final AMP document was submitted to Waka Kotahi on Friday 11th December 2020. Waka Kotahi will continue with the review and moderation process of the final AMP document and financial request submissions with initial formal indications of outcomes expected in February 2021.

CENTRAL GOVERNMENT POLICY SUBMISSIONS

There were no Central Government submissions in the past month.

MBIE Worker Redeployment programme (Original \$2.2M + \$2M Storm variation)

The programme is now nearing completion with all funded activities requiring completion by the end of February 2021. Through MBIE's approval of the variation requesting an extension of the programme completion date from 28th November 2020 to 28th February 2021 we have been able to continue the employment of a significant number of the redeployed individuals through the Christmas period and through until February 2021.

FNDC TRANSPORT CAPITAL PROGRAMME DELIVERY



Projects started in December 2020

None.

Projects to start in January 2021

Category	Sub activity	Location	
215 - Structures Component Replacement	Bridge	General Bridge maintenance	
215 - Structures Component Replacement	Bridge	Scour protection across the network	
341 - Low Cost Low Risk	Seal Extension - Subsidised	Church Rd RP 13317 - 15017	
Seal Extension - Unsubsidised	Seal Extension	Pungaere Road	

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Category	Sub-activity	Location	% Complete	Monthly Update	Next month planned activities	
341 - Low Cost Low Risk	Bridge	Otaua Road M28 N28	80%	Works completed and bridge open to general public	Finalise claims and defects walkover	
341 - Low Cost Low Risk	Resilience	Panguru Road	100%	Continued with pavement stabilisation works and sealed section A and B. Continued discussion concerning additional scope for section C to increase embankment height (funded through NRC).	2 Driveway culverts to be upgraded and driveways sealed. Continue discussion/ agreement for additional scope for section C to increase embankment height (funded through NRC).	
341 - Low Cost Low Risk	Safety	Kaitaia-Awaroa Rd RP3200	100%	Construction completed.	Defects period will end November 2021	
341 - Low Cost Low Risk	Safety	Kaitaia-Awaroa Rd RP5690	100%	Construction completed.	Defects period will end November 2021	
341 - Low Cost Low Risk	Safety	Route 1 Kaitaia-Ahipara (Kaitaia Awaroa Rd) 100% n		Reinspected sealed sections prior to line marking. Final measure-up and issue completion certificate. Project Complete.	Defects period will end November 2021	
341 - Low Cost Low Risk	Safety	Route 2 Puketona Junc- Ohaewai (Te AhuAhu & Old Bay Roads)	Te AhuAhu & Old Bay 100% Construction completed.		Do PACE score	
341 - Low Cost Low Risk	Safety	Route 4 Kerikeri-Okaihau (Wiroa Rd, Waiare Rd, Wehirua Rd & Kerikeri Rd)		Do PACE score		
341 - Low Cost Low Risk	Safety	Route 5 Taipa-Kaitaia (Oruru Rd, Fairburn Rd & Peria Rd)	100%	Construction completed.	Do PACE score	
341 - Low Cost Low Risk	Safety	Route 7 Matauri Bay Loop Roads	100%	Construction completed.	Do PACE score	
341 - Low Cost Low Risk	Safety	Okaihau Triangle between SH1, SH10 and the Mungamuka's	5%	Signages manufacturing and construction/ installation are underway	Continue manufacturing and installation of signs	
Cycle Trail Unsubsidised	Cycleways	Pou Herenga Tai Cycle Trail NZ Heritage	0%	Engaged with the contractor to start Pou installations. Programmed works for Feb 2021.	No work planned until Feb 2021.	
Redeployment Package	New Footpath	Te Hiku Ward: Donald Ln to WINZ on N Park Drive	5%	Construction Pre Award phase	Commence construction	
Redeployment Package	New Footpath	Te Hiku Ward: Foreshore Road, Taipa	100%	Complete	Complete	
Redeployment Package	New Footpath	Te Hiku Ward: Mamaru Road	100%	Complete	Complete	
Redeployment Package	New Footpath	Te Hiku Ward: Point Road, Taipa	100%	Complete	Complete	
Redeployment Package	New Footpath	BOI-Whangaroa Ward: Length of Blacks Road	100%	Construction completed.	Defects period ends Oct 2021	
Redeployment Package	New Footpath	Kaikohe-Hokianga Ward: Kaikohe Footpath Signal Stn Rd, Omapere	65%	Finalised RSA, reviewed and accepted Price from contractor and started construction.	Continue with contruction.	
Resilience - Unsubsidised	Resilience	Panguru Road	0%	Budget is surplus to requirements for the in-scope Panguru works.	Consider and seek approval to restristribute or formally surplus the budget.	
Special 100% FAR	New Footpath	Tau Henare Drive - Waltangi Trust	100%	Construction completed.	Defects period ends Sep 2021	
Special 100% FAR	Sealing Chip seal	Additional funding from Waitangi Trust for Tau Henare Drive (south region)	37%	Discussions with IWI held and aiming to complete post Xmas	Discussions with IWI held and aiming to complete post Xmas	

FNDC Significant Projects

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ROAD SAFETY AND TRAFFIC ENGINEERING

Speed Limit Reviews

• Implementation of the Okaihau-Kaeo-Waimate Speed Limit changes has been delayed by

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approximately 4 weeks (and potentially 2 months).

- Current Status awaiting shipment of equipment deliveries from China
- Revised Program targeting implementation by end of February
- The delay a result of supply chain issues of importing signs, sockets and posts from China. Many other similar projects around New Zealand are experiencing similar delays, as container ships struggle to secure berthing to be unloaded and distribute their products.
- Our contractor, Ventia, is continuing to ensure we are ready to go as soon as all the shipments arrive, by pre-digging the holes for each of the new posts.
- The existing speed limits will continue to be legal and enforceable until the new signs are fully implemented.
- Council will continue updating the public as we move closer to the completion date. Police have
 agreed to help educate drivers in the bedding down period, as we adjust to the lower and safer
 speed limits.
- Police have agreed to help educate drivers in the bedding down period, as we adjust to the lower and safer speed limits.

Other Developments

- The Footpath Matrix is managed by the NTA Road Safety and Traffic Engineering team. There has been a recent increase in requests from Board members to add footpaths to this list. Each request will be added and assessed (desktop and at site) to ensure the request is appropriate, safe and constructible.
- High Risk Rural Roads program of guardrails, improved lane markings, delineation devices and curve signage to reduce the likelihood and severity of run-off-road crashes on our key high-risk roads.
 - The tender evaluation has been undertaken for the Guardrail contract, with final paperwork being completed to award. It is likely that the contractor will commence delivery early in the new year with a view to complete by April 2021.
 - Tenders closed on 10 December 2020 for the Audible Tactile Paint Roadmarkings contract.
- Innovating Streets Projects funded by Waka Kotahi include Kaikohe, Moerewa and Kawakawa
 townships. The Road Safety and Traffic Engineering Team are a crucial component to our funding
 providers, this is to ensure that all work undertaken within the road corridors are safe and compliant
 with best practice. These projects are about the process to delivery, rather than output focused. Akau
 are leading community engagement in Moerewa and Kaikohe with Kawakawa being led by a community
 member. These projects will introduce *Street Art* to the north. All projects must be delivered by the end
 of June 2021.
- After being inundated with application in Sept and Oct, the Road Safety and Traffic Engineering Team has engaged consultant support to process applications at a greater rate. This is shown in the November results with responded applications exceeding the total received. The comparisons across Northland show that Far North exceeds monthly requirements for application processing, requiring a third more time than WDC and KDC.

HOKIANGA FERRY (KOHU RA TUARUA)

Revenue received for December 2020 was \$62,111.13 excluding GST. Whilst this is significantly higher than the same period last year (\$35,670.97), low revenue numbers in previous December's are typically followed by a corresponding spike in January and this can be put down to the timing of banked cash over the Christmas period.

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The service experiences significant pressure at this time of year which means that the vessel operates continuously (known as shuttling) for long periods to reduce queue lengths and waiting time as much as possible. The operator also deployed a Traffic Management Plan including a temporary speed restriction to warn drivers and to mitigate safety issues as a result of queues.

UTILITY SERVICES - CAR (Corridor Access Request) & TMP (Traffic Management Plan)

Roundabouts

- Waipapa 2nd layer of asphalt has now been completed, and 1 more to go. Roundabout curbing was
 completed, and concrete apron completed. Approach islands now complete. All permanent signs are in
 place, most topsoil has been placed, Skippers Lane is complete and there are twice the number of car
 parks available to what they had before. Most of the footpath has also been completed.
- Puketona Good progress, roundabout is formed up, and approach roadworks are nearing completion. Traffic will be again moved over onto some of the new work to enable the tie ends to be completed.
- Kawakawa The roundabout is now in place and traffic using it. Much of the retaining wall is complete. There is still some concrete work to be done along the edges. This will again cause traffic delays, which cannot be avoided.

Other

- UFB 2 Haruru Falls will be followed by Russell.
- UFB 2+ Rangitane area and Okiato has started work followed by Rawene in April.
- UCG connections continuing in all towns, and being well taken up in Ahipara, Kaitaia & Coopers Beach
- RCG are progressing with the cell towers across rural areas.
- Other CAR's are coming in steadily for tree work, Pavement rehabs, other UCG connection work along ROW's, watermains, stormwater pipes being replaced, slip repairs and events.

PARKING

The NTA has been instructed to programme and implement changes to mobility parking spaces district wide as requested by the Disability Action Group. Bylaw schedule changes will be required to ensure that the parking restrictions are enforceable, but this is not considered urgent. These schedule changes will be made once all sites have been signed and marked and the full Parking Bylaw review has been undertaken by FNDC Strategic Planning and Policy group.

FORESTRY AND DUST CONTROL

UNSEALED DUST SUPPRESSION (UDS) SITES

• Summer dust suppression application had been completed. Next application will be in the next summer.

THE CUSTOMER EXPERIENCE

Request for Service

As the chart below shows, the overall number of requests for service are trending down, towards the

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situation one year earlier. The month on month gap comparing the same months from 2019 has reduced by 23%. However, there is still room for improvement and the team are due to explore ways to review this.

Potholes, Edge Breaks, Corrugations

This category remains the highest in terms of numbers, albeit cumulatively for 2020. In December, this was overtaken by the category of 'Roading Correspondence'. The latter is reflected in the second chart following.



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PROJECT DELIVERY

Managing delivery of the capital works programme (new works and renewals) as defined by the Long-Term Plan.

EXECUTIVE SUMMARY

A steady and productive month with projects awarded ready for construction early in 2021.

Green	Strong probability the project will be delivered on tim within budget and with acceptable quality.
Amber	Good probability the project will be delivered on time within budget and with acceptable quality. Schedule, budget, resource or other changes may be needed.
Red	Probable that the project will NOT be delivered with acceptable quality without changes to schedule, budg resources and/or scope

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Project Name: Southern Animal Shelter

Project ID: 261012

Project Phase: Design

Status Item	Current Status	Prior Status	Summary
Overall Project Status	Green	Amber	Design received awaiting reports and engineers plan/report
Scope	Green	Amber	Scope confirmed
Schedule	Green	Amber	Schedule confirmed
Cost	Amber	Amber	Draft QS received with estimated cost
Project Risk	Amber	Amber	Weather, contractor availability, material availability, Covid-19, NRC approval for on-site wastewater system and stormwater discharge

Monthly Summary:

Design and fire report received awaiting engineer reports, electrical report. District Plan pre-assessment carried out and Resource Consent documentation being put together.

Procurement plan approved by Tender Panel in December.

Meeting being held in January with Designer to confirm final design details.

Key Project Risks	Mitigation of Risk							
Funding		Ensure detailed planning learnings from Construction of Northern Animal Shelter is an advantage in making sure all aspects are captured						
Non-compliance		Current structures non-compliant, existing building to be demolished and new kennels to be constructed to comply with Animal Welfare Acts.						
Key Project Milestones	Expected			Status		Comment		
Confirm concept plan	End Septer		nber	On track		Concept Plan Confirmed		
Final Design	Mid Decen		nber	Delayed	1	Awaiting on updated final design and reports meeting to be held with designer in January 2021		
Project Budget Status								
Approved Budget			Actual Spend to Date			Forecast Total Spend		
\$1,443,489.00			\$73,472.32					

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Project Name: Northern Animal Shelter

Project ID: 261011

Project Phase: Construction

Status Item	Current Status	Prior Status	Summary					
Overall Project Status	Green	Amber	Construction underway					
Scope	Green	Amber	Scope confirme	ed.				
Schedule	Green	Amber	Project program	n confirmed.				
Cost	Green	Amber	Cost confirmed	l and approved				
Project Risk	Green	Amber	Weather, conti	ractor availability, mate	rial and time delays due to Covid-19.			
	Monthly Summary: Concrete tilt panels in place							
Key Project Ri	isks	Mitigatio	n of Risk					
Funding		Strict fin	ancial managem	ncial management				
Tender		No longe	er a risk Awardec	a risk Awarded to KPH Construction Limited				
Key Project N	lilestones	Expec	ted	Status	Comment			
Tender award		Late S	eptember	Awarded	Awarded To KPH Construction			
Construction Currently construct			ntly under ruction	On Track				
Project Budge	et Status							
Apr	proved Budg	get	Act	ual Spend to Date	Forecast Total Spend			
\$:	1,470,989.0	0	Project N	Construction: \$527,552.69 Project Management Time and \$1,531,442.00 Professional Fees: \$14,149.07				

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Project Name: TIF Toilets

Project ID: 141539, 141537, 141538, 141581

Status Item	Current Status	Prior Status	Summary			
	Green	Green	Mitimiti: Construction is completed at Mitimiti & CCC achieved; Toilet is Operational			
Overall Project Status	Green	Amber	Opononi: Construction began prior to Christmas and is expected to be completed in February 2021. There is local opposition to the toilet location, and this has resulted in a petition which has been submitted to FNDC for consideration, Community Board are in favour of continuing with project and response circulated			
	Amber	Amber	Waitangi: Building Consent is approved; Resource consent is granted however with still need approval from Heritage NZ.			
	Amber	Amber	Haruru Falls: Tender has closed, and contract awarded however drainage contractor has advised gravity feed to pump station for sewer will not work due to 140mm dip in bridge, options are being assessed.			
Scope	Green	Green	 Waitangi: Scope is clear and approved by Stakeholders Mitimiti: Construction complete. Opononi: Scope is clear and defined. Haruru: Scope is clear but reduced, the cost to get power to site is excessive and so we will alter build to include more natural light. 			
Schedule	Amber	Green	Projects currently tracking behind programme due to consultation and legal agreement delays. An extension of time has been granted from MBIE until Dec 2020, COVID 19 has also played its part in the programme delays.			
Cost	Green	Green	Mitimiti completed within budget. Opononi and Haruru Falls pricing is in line with budgets. Waitangi has not yet been out to market, but QS shows we have a shortfall, but we may have savings at other sites which can be re- allocated to Waitangi			
Project Risk	Amber	Green	Covid 19 will cause large delays to all programmes of work which have already been delayed due to legalising access to all sights. These projects will not be completed in the timeframes initially set out and there is no opportunity to bring them inline, so we have accepted this and asked for funding extensions.			
Monthly Summa	Monthly Summary:					

- Haruru Drainage contractors contacted to price sewer and water connections; this has highlighted issues with fall/head, so options are being sought to rectify
- Waitangi Toilet Building Consent & Resource Consent granted, Archaeological Authority being sought from Heritage NZ (Shell Midden onsite)
- Opononi construction underway, monitor until expected completion in February 2021

Key Project Risks		Mitigation of Risk			
Covid 19 Lockdown will lead to programme delays.		Accept & Monitor.			
Waitangi Toilet – Archaeological Site		Further Iwi Engagement for new site.			
Haruru Falls – Sewer Connection	Drainage Contractor	contacted to provide o	ptions		
Key Project Milestones	Status	Comment			
Waitangi Toilet – Iwi Engagement	angi Toilet – Iwi Engagement July 2020		This is with Infrastructure planning to secure Archaeological Authority. BC & RC completed		
Opononi Construction	October 2020	Met – Late (November)	Construction Underway		
Haruru – Prefab installation	May 2021	Contract Awarded to Permaloo			
Project Budget Status					
Approved Budget	Approved Budget Actual Sp			ecast Total Spend	
\$1,045,688 (combined)	\$461	\$1,951 \$1,000,000 (combined)			

Project Phase: Design/Consents/Construction

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Project Name: Kawakawa WTP Health & Safety Compliance

Project ID: 571140

Project Phase: Delivery

Status Item	Current Status	Prior Status	Summary
Overall Project Status	Amber	Green	A Compliance audit of the water treatment Plant took place in December 2019. The audit established that the plant was non-compliant to the regulations. Temporary emergency works were put in place by FNW to keep the plant operational. FNW have started with the compliance works and aim to have the works completed and the plant certified during February 2021.
Scope	Amber	Amber	 A design and scope for the compliance work was provided by FNW. A recent change in test certifiers has resulted in a scope change. As a result of an overall District wide Scada/Telemetry upgrade project. A new PLC is required and needs to be installed for the overall running of the WTP.
Schedule	Amber	Green	The PO for the new PLC was issued to FNW in November 2020. With equipment lead times, programming of the PLC and the Christmas Shut down period. It is envisaged that the project will now be completed during February 2021.
Cost	Amber	Green	The emergency and compliance work to completion has been estimated to cost \$252K. Additional funding was made available to cover the costs for the compliance works.
Project Risk	Amber	Amber	FNW are conducting their own internal audit of the plant to make sure that all observations made during the past audit have been addressed. When satisfied, FNW will contact the Test Certifier and arrange for the final HSWA Compliance audit to take place.

Monthly Summary:

FNW work to date

The PLC has been procured and a programme is currently being written for the PLC. When available the programme will be downloaded into the PLC and the temporary electrical controls which were put in place to keep the plant operational will be disconnected and new connections made to the PLC.

All turbidity meters and the site office have been reinstated.

The final BC inspection and Compliance audit is scheduled for February 2021.

Key Project Risks			Mitigation of Risk			
Impact of Covid 19 on project schedule				Closed		
Delays with material supply du	ring lock down			Closed		
Limited number of resources a	llowed to work o	on site during lo	ck down.	Closed		
Possible increase in cost of ma	terials			Closed		
Delay in completing BC works – CCC not issued				Closed		
Change in Test Certifier – change in scope				Accept and monitor		
Impact on water supply when	commissioning r	ew equipment i	into service	Management of change		
New PLC upgrade – delay in co	mpleting the ele	ectrical works an	id switch over	Accept and monitor		
Chemicals deliveries – decantir	ng area does not	meet IXOM req	uirements	Closed		
Key Project Milestones	Expected	Status	Comment			
Compliance Audit	Dec 19	Completed	Plant not compliant add	ditional operational work required.		
Order chemical tanks	April 2020	Completed	Tanks ordered on 17/0	7. Lead time 21 days		

Install chemical tanks	May 2020	Completed	Delay due to change in Test Certifier's additional requirements. An engineered external concrete slab has had to be constructed for the PACL Tank. Weather delays were also experienced whilst prepping up the area for the slab.
Chlorine room fit out	June 2020	Completed	

80% Complete. Due January because of the late issuing of the PO for the PLC and the

Electrical fit out	July 2020	Late	Christmas Shut down period.				
Issuing of Location certificate	Sep 2020	Late	February 2021				
Project Budget Status	Project Budget Status						
Approved Budg	get		Actual Spend to Date Forecast Total Spend				
\$220,000			\$165,780 \$220,000				

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Project Name: Kaitaia Water – Sweetwater Bore and Pipeline

Project ID: WAP0256

Project Phase: Procurement

Status Item	Current Status	Prior Status	Summary					
Overall Project Status	Amber	Amber	Physical Works contract is ready for award however property easements are delaying critical path.					
Scope	Green	Green	Scope understood – potential redesign to appease landowner					
Schedule	Red	Amber	Delay in procurement award due to Easements not being secured has increased as commercial negotiations have not been successful. It is now likely a formal process will be required that could delay award until end March 2021					
Cost	Amber	Green	Construction costs are within budget allowance however delay to award will impact phasing of spend resulting in a likely decrease in spend this FY.					
Project Risk	Amber	Amber	Property and Easements are subject to commercial negotiations					

Monthly Summary:

Financial Due Diligence on the Preferred Tenderer is underway for the main Physical Works contract and pre-letting is planned for January with a focus on opportunities to mitigate delay of contract award.

Negotiations continued throughout December to try and find a resolution that is acceptable to Elbury Holdings and FNDC. These negotiations were unsuccessful, and the formal hearing was completed on 14th December. Council voted to continue with the works and the decision was appealed to the district court on 22nd December.

Other property agreements are progressing, it will not be possible to resolve easements with some until the route with Elbury Holdings has been agreed.

The estimated delay to contract award has increased, the delay cannot be estimated accurately as no date for appeal has been set. It is likely to be end of March 2021 resulting in a 16-week delay to contract award.

The McMillan contract for bore development has been closed out and full and final payment has been made.

Key Project Risks					Mitigation of Risk			
There is a risk that easement negotiations delay the award of contract.				Continued focus to project team to resolve Meeting with landowners with Elected Members Formal process using Local Government Act				
There is a risk of significant adverse media coverage should the obligation not be delivered and there is not enough water of drinking water standard quality to meet demand.				Prepare media plan and key messaging				
There is a risk of another lockdown during the construction programme				Request contractor mitigation as part of procurement Pricing Schedule allowance for level 2, 3 and 4 working/stand down				
Key Project Milestones	Expected		Status		Comment			
Design contract award	29/11/19		Complete					
Design complete	31/07/20		Complete		Close out of comments ongoing			
Commence PW procurement	June 2020		Complete					
Award PW contract	Nov 2020		Delayed		Estimated 31/03			
Practical completion	September 2022 On target		On target	Reviewed and revised to October 2020 however delay to contract award will likely increase this				
Project Budget Status								
Approved Budget Actual Spe			Actual Spe	end to Date Forecast Total Spend		Forecast Total Spend		
Finance to provide			Finance t	nce to provide Finance to provide				

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Project Name: Kerikeri WWTP

Project Phase: WWTP Construction

Status Item	Current Status	Prior Status	Summary		
Overall Project Status	Amber	Amber	Completion of WWTP construction programme was reached at the end of September 2020. The Practical Completion Certificate was issued on 23 October 2020. Commissioning Phase 5 was completed in November and Phase 6 Commissioning started on 16 November 2020. Phase 6 will continue in January 2021, as results are not compliant yet and the Dewatering Plant needs to be commissioned and tested. The final cut over connections of the reticulation work has resume and will be completed by May 2021.		
Scope	Green	Green	Scope creep from design issues due to awarding contract without "IFC" drawings, is managed and the HAZOP has been revised for the new site and is completed.		
Schedule	Amber	Amber	Design discrepancies, resolution of compliance and health and safety issues are identified and managed.		
Cost	Amber	Amber	Cost implications have been communicated to PSG via report dated 28/02/2020 and are not expected to be exceeded.		
					Schedule extensions and cost increases are managed as stated above. Pipework damages within Area of Benefit, which was discovered during testing in November 2020.
Project Risk	Amber	Amber	Practical Completion was reached on 23 October 2020, with some snags listed which was rectified by end of November 2020. Providing of Operations and Maintenance Manual, Asset Data Register and As-builts needs to be handed over to FNW after signing off by consultants.		
			Unforeseen in Phase 6 Commissioning Phase as well as requirements from Operators and defects picked up during operation.		

Monthly Summary:

Construction of the new Treatment Plant is completed with only defects, testing of the Dewatering Plant and installation of gates outstanding. The As-Builts, O&M manual and the Asset Data Sheets was submitted by the contractor but will need review and sign off by the Project Team. The Practical Completion Certificate was issued on 23 October 2020 and the works were insured by FNDC.

Commissioning Phase 5 was completed by middle November where after Phase 6 started on 16 November 2020 and will run until the end of January 2021 after completing of the testing of the Dewatering Plant. Key work completed in the month of December 2020:

Key Construction activities during December 2020

- Construction Roading / Earthworks / Pipework
 - o Finishing up earthworks around structure and landscape planting;
 - o Security Fencing and gates, and
 - o Defects list.
- Commissioning
 - o Phase 6 Commissioning in progress.
- General
 - o Valuation and Agreement with Davies Trust in progress; and
 - o Contract Completion Documentation, asset register and O&M Manual submitted by Contractor.
- Reticulation Contract
 - o Pressure testing and Fixing of leaks;
 - o Installation and commissioning of first 9 properties in Shephard Road and Campbells Lane.

Main activities planned for January 2021 are installation of access gates, Dewatering Plant commissioning and review of handover documents by Mott MacDonald and handover of project to FNDC/FNW after sign-off of handover documents (by February 2021).

Work will continue by United Civil with the cutting over of the house connections, with an estimated completion by May 2021 and close out of projects by May/June 2021. Decommissioning of the existing treatment facility in Shepherd Road is scheduled for 2021 and will commence after funds are secured and committed.

Key Project Risks	Mitigation of Risk
Damage to reticulation network from fibre network installation	Pressure testing of sewer rising mains at identified locations by Reticulation Contractor was done and leaks were detected. Fixing of leaks started in December 2020.
Reverse sensitivity around new WWTP and infrastructure	Assess design odour control efficiency at commissioning
Design changes increase schedule and cost	Facilitate alignment between design and construction
Managing stakeholder expectations	Communicating of timeframes ongoing through monthly newsletters and direct communications by staff and Project Manager. Number of RFS received from community - ongoing.

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Commissioning Phase 6 - Unforeseen and results not bei	ng achieved	Only dewatering process to be commissioned. Defects picked up by Operators that will require adjustments or additions.				
Abatement Notice issued on non-compliant discharge		Getting the plan	Getting the plant compliant and communicating with NRC			
Key Project Milestones	Expected	Status	Comm	ent		
Commissioning Phases of WWTP	30/01/20	In progress	Phase 1 to 5 completed. Phase 6 started on 16 November 2020 and will run for 4 to 6 weeks until pla operations are in stable condition. Dewatering Plant commissioning in progress. Plant not yet compliant.			
Completion of Kerikeri WW reticulation and Close Out	31/05/21	Pending		First stage, part of second stage completed. Stage 3 outstanding. Work to commence in Dec 2020		
Decommission existing Kerikeri WWTP	30/08/21	Pending	Commence May 2021. 130-day allowance, time requirement TBC.			
Project Budget Status						
Approved Budget	pend to Date Forecast Total Spend		Forecast Total Spend			
Finance to provide	Finance	to provide Finance to provide				

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Project Name: Paihia WWTP Upgrade

Project Phase: Planning and Design – Regress due to Chemical Dosing Requirements

Status Item	Current Status	Prior Status	Summary
Overall Project Status	Green	Green	Construction is 99% complete. PC Certificate has been issued and only minor defects remaining to close out.
Scope	Amber	Amber	The recirculation works have been designed but a chemical dosing system is also now required to be included. WSP have been asked to provide further input to modular options at Paihia and Haruru Pump Station
Schedule	Red	Red	Feedback from design into modular units is lagging. Initial target to have design completed in Jan 2021 and modular units installed in Feb but this looking less likely as design information is not forthcoming.
Cost	Amber	Amber	Project is currently within budget, but this is now at risk due to the new requirements for a long-term chemical dosing unit at either Haruru station or Locally on site.
Project Risk	Red	Red	The July testing phase has indicated a non-compliance in the plant's chemistry for both levels of Ammonia and Ph. The recent result analysis has indicated that a long-term chemical dosing facility will be required for the plant. This is yet to be agreed but is a rink to project budget and operational expenditure is likely to increase substantially.

Monthly Summary:

Defect close out is still underway with the final items to be closed out in the coming weeks.

The July testing phase results have been received and have been Analysed by the design engineer and WSP.

Chemical dosing completed manually at the plant has continued, results received on the 23rd of December now show that the plant is compliant with its resource consent levels of Ammonia and Ph.

Chemical dosing has continued through the Christmas break and results have been published for review by WSP, which may see the chemical dosing levels reduce.

Initial coting has been received for both chemical dosing units which are estimated at \$120,000 for each unit.

Budgets to be assessed for inclusion and allowance for each unit.

Accomplishments: Phase 5 – Reliability Testing Complete Phase 6 – Performance Testing Compl Practical Completion 23 March 2020				•	complishments: ation to the code of compliance	
Key Project Risks Mitigation of Risk						
Alkalinity Adjustment.		To be completed as a separate project This has been foregone due to requirements from chemical dosing.				
Land Stakeholder Engagement and Approva (Tangata Whenua).	Management to meet and agree on Engagement Protocols with Tangata Whenua. (guidance required here for new alkalinity works and engagement protocols, including plants non-conformance and if this requires notification to Iwi)					
Change Management.		Maintain week	Maintain weekly reporting and filing system.			
Meeting Enforcement Order Conditions N Conformance realised	Monitor progress, continuously assess changes and impact to delivery, and apply for extension if required. Manual chemical dosing required in the short term to bring the plant back into compliant levels.					
Key Project Milestones	E	xpected Status Comment		Comment		
Completion of Cover install	31-Jan-20		ſ	Vlet	Early completion 14 Jan 2020	
Commencement of performance test	26-Feb-20			Vlet	Early completion 20 Jan 2020	
Practical Completion / Handover	22-May-20			Vlet	Early completion 20 Mar 2020	

Completion Design of Ammonia works	30-June-20	30-June-20 Ongoing Dela		Delayed due to August testing results and knock-on effects.		
Project Budget Status						
Approved Budget	А	ctual Spend to Date		Forecast Total Spend		
\$6,478,069.71		\$5,782,256.13		\$6,478,069.71		

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Project Name: Opononi New Water Source - Smoothy Road Bore

Project ID: 571008

Project Phase: Pre-Implementation of Stage 2

Status Item	Current Status	Prior Status	Summary
Overall Project Status	Green	Green	All physical work is completed. Preparation of the SO Plan identifying the land to be acquired by Council is underway, as well as the formal acquisition of the land area which must be completed by Gazettal.
Scope	Green	Green	No changes in scope, but additional staging of the project.
Schedule	Green	Green	Completed
Cost	Green	Green	Cost of project did not exceed budget.
Project Risk	Green	Green	Agreement with Top Energy on easements and maintenance of lines and vegetation in the area – Agreement was reached.

Monthly Summary:

All physical work is completed on project. The only outstanding items are:

- Survey work and to obtain LINZ approval.
- Title to the land acquired from the landowner is to be obtained by way of gazettal.
- Compensation to the landowner

Hokianga Holdings Limited, Top Energy and Council have signed the sale and purchase and easements/maintenance agreements, and the surveyors are appointed to start with the survey and prepare the Survey Office Plan showing the land to be acquired to get LINZ approval.

Property Group was appointed to complete the formal acquisition of the land area which must be completed by Gazettal.

The Estimates of the remaining work are as follows:

Owner	Description Estimated Costs (Ex							
FNDC/Law North	Landowner Com	pensation	\$21 710					
Palmer Macauley	Landowner Lega	l Fees		\$1 559.30				
Donaldson Surveyors	LT Survey and Peg of boundaries for the issue of a new title and Legalise of land and easements \$5 765 (submission to LINZ)							
Law North	Agreement to incorporate the compensation provision, finalising the easement instruments and having \$6000 the authority and instruction forms signed by all parties and completing registration once the survey office plan is approved. Registration of a compensation certificate.							
FNDC / Property Group	Title to the land acquired from the landowner is to be obtained by way of gazettal. Awaiting quote from\$3 000Property Group							
Stellar Projects	Project Manager	ment (Allowanc	e until Jan 202	.0)		\$7 000		
Estimated Total						\$45 034.30		
Key Project Risks								
Land requirements	and easement agr	reements.	Liaise and ke	ep a good	I relationship with the landowner.			
Maintenance of To	p Energy lines by F	NDC	As per the ag	greement.	Tree line needs to be maintained to prevent dan	nages to overhead lines.		
Key Project Milesto	ones	Expected	Status	Comment				
LINZ approval and formal acquisition must be completed by 28/02/21 In progress Appointments made for Surveyor and Property Group Gazettal				vaiting works completion				
Project Budget Stat	Project Budget Status							
Approved Budget Actual Spen			Spend to Date	ate Forecast Total Spend				
\$946,	\$946,665 Finance to provide				Finance to provide			

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Project Name: BOI Sports Complex

Project Phase: Concept Stage

Status Item	Current Status	Prior Status	Summary
Overall Project Status	Green	Green	The next milestone for the project is the planning stage which focusses on the delivery team's approach to the project. From here the project will move into delivery stages, focussing on a staged design delivery and targeting early construction activities which can be commenced as a priority.
Scope	Green	Green	To manage the development and delivery of a Waipapa Sport Hub on the land acquired. The development must meet stakeholder, community, and sporting code requirements.
Schedule	Green	Amber	Currently the project is tracking slightly behind the original programme, this is due to the final execution of the funding agreement which only happened on the 23 rd November 2020, originally planned in September. The RC processing will now be split to allow for enabling works and bulk earthworks to commence ASAP and the sites main road junction to commence in January 2021.
Cost	Green	Green	The project is running within budget. Immediate procurement required includes the architect and specialist consultants to support the RC application.
Project Risk	Amber	Amber	Preliminary Concept Design layout approved by Working Group. Decision of the final sports field surface types needs to be done. Any changes to decisions would be a risk to the project

Monthly Summary:

The Preliminary Concept Design layout was approved by the Working group. New Zealand Turf Management Solutions (NZTMS) compiled a recommendation report on various types of field surfaces and present it to the Working Group. Feedback from the Sporting Code was received and the Working Group decided on the types of fields that will be designed to.

Procurement and contract drafting for the improvements around the junction with SH10 are still underway and will be concluded by the end of the month, after which physical works will start.

Haigh Workman are continuing with concept investigation on civil engineering services. Williamson Water and Land Advisory has been aappointment to complete a Groundwater assessment

Key work completed in the month of December 2020:

- Project working Group decided on types of sports field surface types
- SH10 works procurement of contractor started Tender panel approved approach on 21 December 2020
- Sports Field design consultant complete recommendation report on the for consideration
- Completion of the Topography Survey
- Completion of the Electrical resistivity tomography (ERT) survey (as the start of the groundwater assessment)

Key Project Risks		Mitigation of Risk			
Design decisions			Continues communication with role-players and getting sign-offs in time		
Market capacity to deliver			Procurement planning		
Community Engagement			Agreement of a Working	Group to ste	er matters
Downstream Impact – Ongoing future	operation co	sts	Value Engineering during	design	
Supply Chain – getting services and m	aterials neede	ed	Early procurement		
Programme Governance – Conflict of	Interest		Set up Mitigation Plans		
Key Project Milestones	Expected		Status		Comment
Initiation	03/08/2020		Completed		
Resource Consent	05/10/20-19	9/01/21	Ongoing		
Concept Design	Nov 2020		Ongoing		
Developed Design	Jan-Mar 202	21			
Detailed Design	Mar-May 20)21			
Procurement	Apr-Jun 202	1			
Construction	Jul 2021				
Project Budget Status					
Approved Budget		Actual Spe	end to Date Fored		Forecast Total Spend
\$11M		\$5M – Land acquisition		\$11M	

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Project Name: Kerikeri Domain Revitalisation

Project Phase: Concept Stage

Status Item	Current Status	Prior Status	Summary
Overall Project Status	Green	Green	The community and working groups agreed on the initial scope of work for the current funding grants. This will now be captured on a concept layout plan for the area and works can commence to ensure detailing of the scope and approach to physical works is efficient.
Scope	Green	Green	Scope has been agreed by key stakeholder groups, this is now being developed into a concept layout plan that speaks back to the master plan for the reserve. This will allow procurement plans to be finalised and work packages to be released for tender response. Initial works (Skate Park and Basketball Court) design is being done along with the concept layout plan development.
Schedule	Green	Green	Currently the project is tracking slightly behind the original programme, this is due to sign off from stakeholder groups for scope, originally planned in September.
Cost	Green	Green	The Project is currently within budget
Project Risk	Amber	Amber	Procurement of work packages through Christmas period and January rush

Monthly Summary:

Good progress has been made to date surrounding the information required from the project steering group, but some time delays have been experienced in providing the final sign off on the project scope.

Akau have been appointed for the concept layout plan for the reserve which captures the scope of the new funding received. This concept layout plan should be completed by end January 2021. Design of the Basketball Court and Skatepark is being done alongside the concept layout plan development.

Procurement is looking to be complete by end of January 2021 on the build elements and works are expected to commence in Feb. (Skatepark and Basketball Courts)

Further works which require specific design will be identified and move into design in January.

No Change from November Report due to Christmas Shut Down

Key Project Risks	Zey Project Risks			Mitigation of Risk		
Market capacity to deliver			Procurement planning			
	inity Engagement - Community buy in is KEY, the community might hey didn't want it in the first place Agreement of a Working Group to steer matters			er matters		
Downstream Impact – Ongoing f	uture operation co	osts	Value Engineering during	g design		
Supply Chain – getting services a	ind materials need	ed	Early procurement			
Programme Governance – Conflict of Interest			Set up Mitigation Plans			
Key Project Milestones	Expected		Status		Comment	
Initiation	03/08/2020)	Completed			
Community Scoping	Aug-Sept 20	020	Completed		Workshop held	
Developed Design	Nov-Dec 20	20	Underway			
Detailed Design	Jan 2021					
Procurement	Jan 2021					
Construction	Feb 2021					
Project Budget Status						
Approved Budge	et	Actual Spe	end to Date		Forecast Total Spend	
Ś 3M		ć	01/1		\$ 314	

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TOURISM INFRASTRUCTURE FUND

August 2019 Applications:

	Project	Status	Notes
1a	Waipapa Toilet Capacity Upgrade (Soakage Field)	Approved with Funding Agreement	Building consent issued in January. Supplier construction contract under review. Once contract is finalised construction date will be finalised.
1b	Waitangi Jetty Toilet Capacity Upgrade (BOI Yacht Club)	Approved with Funding Agreement	The new extension block has been completed. The conversion of the old shower units to toilets is being repriced/updated. Joint initial payment received from MBIE of \$187,000 + GST for both Waipapa Toilet upgrade and Waitangi Jetty Toilet Upgrade.
2	Pungaere Road Seal Extension	Approved with Funding Agreement	Work has continued onsite with the completion of site preparation and clearance, along with the initial stages of the drainage works. Pavement design has been completed, with the final site testing results for existing subgrade and pavement confirmed in early December. The site safety audit and improvement recommendations have been completed. The next stage of works through January will be the continuation of the drainage works, with the installation of scour protection and culvert upgrades as required. Work is also underway to finalise a solution for drainage improvements as part of the works to address historic stormwater discharge control issues. Initial payment received of \$293,584 + GST. Additional MBIE payments totaling \$400,000 + GST has been submitted and will be paid early January.
3	Cable Bay Carparks	Approved with Funding Agreement	Initial payment received of \$79,436 + GST. Agreement has the construction phase scheduled in the next financial year. Anticipate initiating design in the new year. Potential to align with the Te Hiku PGF project to maximise productivity and local economic benefits.
4	Taipa Beach Pohutukawa Protection	Approved with Funding Agreement	90% of the remedial work has been completed in accordance with the arborist report. Last remaining rocks to be placed in January.
5	Paihia Beach Toilet Enhancement (Outdoor Shower/Drainage)	Completed	Drainage issue resolved and shower installation is now complete.
6	Stone Store Lighting	Approved with Funding Agreement	Design amendments have been discussed and a revised proposal is due to be presented no later than the 24th of January.
7	Freedom Camping Operational Plan Study Grant	Approved with Funding Agreement	Demand and supply conclusions are being developed. Financial data analysis is complete. RFS data has been received and analysed. Information meetings held with Parking Enforcement Officer and Recreational Services Team Leader.
8	District Boat Ramp Operational Plan Study Grant	Approved with Funding Agreement	Final report drafting continues. February 2021 targeted in order to support FNHL resource consenting requirements for Rangitane reclamation.

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August	2019 HF Fulluling				
Project	t	Community	FNDC	MBIE	Total
1a	Waipapa Toilet Capacity Upgrade (Soakage Field)		\$120,000	\$254,600	\$424,600
1b	Waitangi Jetty Toilet Capacity Upgrade (BOI Yacht Club)	\$50,000	\$120,000	<i>\$234,000</i>	Ş424,000
2	Pungaere Road Seal Extension		\$793,584	\$793,584	\$1,587,168
3	Cable Bay Carparks		\$238,136	\$238,136	\$476,272
4	Taipa Beach Pohutukawa Protection		\$8,000	\$8,000	\$16,000
5	Paihia Beach Toilet Enhancement (Outdoor Shower/Drainage)		\$14,300	\$14,300	\$28,600
6	Stone Store Lighting		\$13,750	\$13,750	\$27,500
7	Freedom Camping Operational Plan Study Grant		\$37,500	\$37,500	\$75,000
8	District Boat Ramp Operational Plan Study Grant		\$37,500	\$37,500	\$75,000
	Totals	\$50,000	\$1,262,770	\$1,397,370	\$2,710,140

August 2019 TIF Funding

Round 5 March 2020 TIF Applications

Note: Round 5 has been postponed by MBIE due to Covid-19 and will likely be cancelled.

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PROGRAMME DARWIN

To lead best practice enterprise asset management in New Zealand.

Mā te kimi ka kite, Mā te kite ka mōhio, Mā te mōhio ka mārama

Seek and discover. Discover and know. Know and become enlightened.

Learning is a journey. It starts with a conscious effort to seek knowledge. Upon seeking, you will surely discover a brand new thing or see a familiar object in a totally new light. Eventually, the things you know will lead you to become wise beyond your years. Seek. Discover. Know. Be enlightened.



EXECUTIVE SUMMARY

Continual but constrained progress summarises this month report. Ongoing data cleansing, system development and engagement with key data supply chain partners are the highlights. Work has almost been completed on the condition data procurement and a full status report has been prepared for elected members. Work is continuing on the people and culture workstream with a plan to build off the recent competency reviews to establish development pathways for existing staff. A permanent fixed term programme manager will be in place early in the new year to reduce our dependency on consultant resource.

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Programme Vision

Vision: Leading best practice enterprise asset management in NZ.

Mission: Lifting the understanding and delivery of asset management across the organisation.

🗆 Status Indi	cato	rs
Overall	÷	No significant change in status with progress continuing to be impacted by resourcing commitment to other FNDC matters. System workstream remains on track and initial work on data supply chain engagement has commenced
Benefits		Benefit realisation overview included in LTP narrative.
Capability		Issues remain with project delivery resourcing across the project team including assets SME's, IT project support and supply chain capacity to support project inputs. New Programme Manager selection underway.
Leadership		Programme leadership has been strengthened with the appointment of a permanent Manager Assets and Planning to foster greater integration and/or task prioritisation. Will move this green once Program Darwin Manager programme manager is appointed.
Budget		Currently within forecast but quality of data under investigation. Future years budgets yet to be defined.
Roadmap		Revised timeline, deliverables and expectations detailed on November update to Elected Members.
Risk		An additional item raised around commitment distraction arising from work being done on water reforms.

□ State of Play							
Last Month	Next Month(s)						
 Continued engagement with all data supply chain partners e.g., Far North Waters on system requirements. Appointment of permanent (fixed term) Programme Manager underway. Revised strategy of condition data capture works 	 System Workstream – no change. Transformation workstream - Stakeholder workshops to debrief on culture survey results and Field Force recommendations set down for new year. Transformation workstream - development of impacts to the roles & responsibilities and competency based upon recent competency assessments. Data & Analytics workstream -additional condition assessments underway (valve location and CCTV). 						

Programme Workstreams					
Name	Туре	Status	Programme Comment		
INFOR	Project		Full operational use of INFOR will not be possible until September 2021 at the earliest (noting some parts may be ready before then) as previously articulated. Status updated to reflect revised program.		
Data and Analytics	Operational		No budget change and still expect to have a pilot by June 2021 but a fully operational region wide LAMP will not be completed by June 2022.		

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🗆 Programme	Workstreams		
Name	Туре	Status	Programme Comment
People & culture	Improvement		Initial survey completed (Field Force). Transformational plan (for assets team) being scoped.
Customer and Stakeholders	Improvement		Engagement program yet to be initiated. Communications framework to be reinvigorated.

Programme Milestones

Milestone	Baseline Date	Actual Date	Status	Comment
Identify Stage completed	NA	30/11/19		Programme plan agreed
Define Stage completed	31/03/20	1/02/21		Operational demands on project resources along with discovered issues relating to data and data access have delayed until we have condition data and working system environment. Deliverable date changed to reflect the adaptation necessary once we start importing and manipulating condition data.
Execute Stage completed	30/06/21	30/6/22		Different projects & workstreams will deliver at different times over a 2-year timeframe. The fully mature system is unlikely to be delivered by June 2022 due to the reduction in condition budgets.
Product Review Stage completed	30/06/22	20/12/22		Reviews will take place as each project is completed; however overall review of programme is now scheduled for Jun – Dec 2022

🗆 Тор Р	Top Programme Issues								
Ref #	Explanation & Cause	Priority	Action Required	Owner	Date Raised				
5	Operations commitments means availability of staff to participate in workshops or contribute to the programme has constrained progress.	1	Some improvement in the outlook with additional resourcing coming on board. Still expect this issue to prevail throughout the life of the programme.	Tony McCartney / Andy Finch	03/05/ 20				

🗆 Тор	Programme Risks						
Ref#	Description	Risk Status	Current Risk Rating	Trend of Risk Rating	Mitigations	Owner	Review Date
11	Program resourcing constrains may lead to an adjusted risk profile.	Possible	Major	Stable	Status report and mitigation framework presented. Full programme lifecycle program update by November 2020.	Programme Manager	12/02/21
14	Investigation into budget management	Probable	Significant	Stable	Changes to budget allocation still being worked through	Programme Manager	12/02/21

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🗆 Top Programme Risks							
Ref #	Description	Risk Status	Current Risk Rating	Trend of Risk Rating	Mitigations	Owner	Review Date
	have identified some potential issues with coding of time.						
15	Water reform investigations/n egotiations impact both progress and willingness to advance program	Possible	Major	Stable	Programme leadership commitment and organisational information governance committee oversight.	Programme Manager	28 Feb 2021

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INFRASTRUCTURE PLANNING

Policy making and integrated planning. Managing consents which authorise activities essential to the services Council provide.

The following provides an overview of the current priorities on the Infrastructure Planning Team's work programme. This includes planning projects, collaboration and engagement activities and key consent applications and renewals.

EXECUTIVE SUMMARY

In the month of December, the Infrastructure Planning team progressed work on several key projects:

- A hui in Kohukohu to discuss the author of the Cultural Impact assessment took place and is an important milestone as we seek to fulfil the s92 Request for Information by NRC.
- A pre-mediation meeting with the Taipa WWTP resource consent appellants was held mid-December with the appellants and key FNDC staff. Two additional meetings have been scheduled for January 2021. Environment Court mediation has been scheduled for February 2021 if necessary.
- Infrastructure planning continue to work with Strategic
 Planning and Policy team on key pieces of work including
 - Parking policy and bylaw review
 - Water supply bylaw review
 - On-site water storage options

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	Key:	• Complete	• In prog	ress • Parko	ed		Stormwater	District Facilities	W astewater	b Water		
Activity	Asset	Status Expected Completi					Comment					
	Group	Concept	Plan	Deliver	Handover	on						
Strategies / Plans	s / Policie	S										
District Transport Strategy		•	•	•		FY19/20	the NZTA Board early in the new	year. The programme has been re Transport Plan. The Transport Stra	mplete and has been endorsed by co efined and re-entered into the NZTA ategy development project is now b	financial system in the s		
Sludge Strategy – Dredge and De-watering	dge and			dredge the ponds, dewater the s Strategy identified substantial co	sludge and then transport the slud ost savings could be realised by ow	tly outsourced to experienced contr ge to a storage area, usually offsite. ning and operating our own dredge ut the project does not have an app	This is a very expensive and centrifuge. Tender					
Equipment								_	managing this ongoing project; the ne Asset Management Team or will l			
Sludge Strategy – End Use	8		•				effective "end use" for the bio so	olids product. In 2018 and 2019 w	018 Sludge Strategy determined tha re looked further into practical optic nd staff are of the opinion that the s	ons for quarry rehabilitat		
									ding on (not re-visiting) the 2018 str r will be managing this ongoing proj			
WWTP consent replacement programme	Ş	•				Ongoing	now been completed to cover th	ne consent replacements that need ents for each consent application.	ent replacement process for Counci d to be lodged over the next five yea Commissioning of urgent technical v	ars. That work provides k		
2021-2051 Infrastructure Strategy	₽ ♦ ;	•	•	•		Ongoing			are an infrastructure strategy as part ture challenges. The Strategy is larg			
Paihia Network Model Upgrades	6	•	•	•		Mid 2021	supply network, and monitoring	equipment remains deployed in t	water supply and wastewater netwo he wastewater network. Consultan r 30 June 2021, in accordance with I	ts are continuing to revie		
Water and Wastewater Demand Forecasting	♦ ₽	•	•	•		Mid 2021	data summary information provi development of methodologies. be any slippage against the prog Once demand forecasting has be	ided by FNDC staff. Once the data A staffing change within Morphur ramme, which is on track to have	nd forecasting methodology (Morph review is complete, Morphum will o n has resulted in a new project man the methodologies developed, and Management Plans are intended to b in increased capacity.	butline a way forward, ba ager at Morphum howev implemented with regard		
Wastewater Discharge to Land Investigations	¢ 7	•	•	•		Ongoing	granted unless a discharge to lan the time of renewing the resource FNDC staff have been working w resource consent renewal priorit	nd has been considered and found ce consents for discharges from th vith consultants to develop a robus ty. A high-level assessment for disc	that a resource consent application not to be economically or practical rese WWTP, FNDC will be required t st discharge to land methodology, w charge of treated wastewater to lan omic and practical viability, are inte	bly viable. The majority o o demonstrate sufficient hich is currently being an d is in the final stages for		



	Key:	• Complete • In progress • Parked					Stormwater	District Facilities	P Wastewater	b Water
	Asset		S	tatus		Expected				
Activity	Group	Concept	Plan	Deliver	Handover	Completi on	Comment			
Rawene WWTP Optioneering	Ş	•	•	•		Ongoing	preferred upgrade option and if it with Te Mauri o te Wai we feel th	does, then Council must consult at identifying a preferred option i	port with multi criteria analysis and on this upgrade option (and alterna n time for LTP consultation will rush ment planned for year 1 of the LTP.	tive options) through a
Parking Policy and Bylaw		•	•			June 2022	-	nt research undertaken in-house.	d will be automatically revoked on The Project Plan will be developed option of this critical project	
Engineering Standards		•	•	•		June 2021	which is currently under review. will hold itself. IAMs staff are par Whangarei District Councils stand resulting draft is now being review	The existing standards were prima t of a working group which has be lards as a template will provide re wed by the wider FNDC staff, Allia	vanced on a full rewrite to ensure th rily written to control developers, b en set up to undertake the rewrite gional alignment. Internal worksho nces and Regional Council prior to b Members in February and subseque	but the new version will with assistance from co ps have been held to co being soft launched to p
Consent Applicat	tions/Aut	horisations								
							The 2019 Taipa WWTP discharge	consent decision has been appea	ed to the Environment Court.	
Taipa WWTP Renewal/Appeal	Ş	•	•	•	•	Under Appeal	2021 in Kaitaia. Staff, including th responsibility of the Working Gro	e CEO and GM (IAM) met with the up (required to be established by	s process have been appointed. Tw e appellants mid-December to see in conditions of the consent under ap I for January 2021 to establish if an	f progress could be mad peal) in advance of med
Kaikohe WWTP Renewal	Ş	•				August 2021	wastewater into the Wairoro Stre 2021. Initial investigations into the Stream. The nutrient levels in the likely that the treatment plant wi	am. The existing consent expires ne effects of the discharge indicate e discharge will need to be reduce Il need a significant upgrade. The on land disposal feasibility and the	an areas of Kaikohe and Ngawha. T 30 November 2021. An application e that the discharge from the treatr d to improve water quality and to n preferred upgrade option has been e commissioning of an ecological as le upgrade option is identified.	to renew the consent w nent plant is affecting th neet appropriate enviro hidentified along with h
Kohukohu WWTP Renewal	Ş	•	•	•		Nov 2020	representatives regarding an app Hono staff has been sought. The	roved CIA author. Staff have been CIA is the final report required to	quired follow up discussions betwe unable to elicit a response from ha fulfil NRC's request for information d by hapu representatives at the hu	pu reps regarding this n ; if hapu support for a n
Opononi / Omapere WWTP Renewal	Ş	•	•	•		June 2021			that this application will be publicly on, and because hearings for the ap	
Puketotara surface water take (source for Kerikeri WTP)	٢	•	•	•		March 2021	NRC have issued the draft conditi	ons for a consent. Discussions ab	out the suitability of the conditions	continue and are yet to



to be resolved.

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	Key:	• Complete • In progress • Parked					Stormwater	District Facilities	Wastewater	W ater	
	Asset		s	tatus		Expected					
Activity	Group	Concept	Plan	Deliver	Handover	Completi on	Comment				
Motutangi Drainage District Concession application		•	•	•		ТВС	In late 2019 DOC advised that the draft concession report would be peer reviewed and then be sent to Kaitaia's Operations continued requests for updates no information was provided until recently. In late August staff were advised DOC had a ne concession application would be approved (or otherwise) by the new manager. The change in management has required a understood the Manager is seeking an internal legal opinion on the drainage activity in the Kaimaumau Scientific Reserve. to work with DOC to progress the concession application.				
Kawakawa WTP groundwater reassessment	٢	•				January 2021	Staff have initiated a project to review the correlation between groundwater levels in the source aquifer and the Tiroha plant. If there is less of a correlation between the two sources than initially determined, then an application to reduce t be made.		-		
Waitangi public toilet consent application		•	•	•		Dec 2020		on for a public toilet block near Wair from Heritage NZ and will be lodged	• • • •	proved by FNDC in Dece	

Comment							
Collaboration and Engagement							
The purpose of the Climate Change Working Group is to develop a regional collaborative approach to climate change adaptation planning for local government in Northland. The workin continue to participate in the working group in addition to participating in the development of FNDC's climate charge roadmap which is being led by SPP.							
Infrastructure Planning team staff have recently engaged a consultant to assist FNDC 3W planning staff to develop water and wastewater demand forecasting methodologies, of which population growth in serviced areas. The demand forecasting methodology project includes reviewing FNDC's current methods of forecasting growth and advising on a consistent meth forecast growth in the district, this growth forecasting review is scheduled to take place in early 2021.							
A new departmental collaboration project with the Strategic Planning and Policy department has commenced to write a district-wide parking policy and associated bylaw. The need for identified throughout the Integrated Transport Strategy and Plan. The current Parking and Traffic Control Bylaw was not reviewed and will be automatically revoked on 17 June 2022.							
The team remain actively engaged with the Disability Action Group. Recent activity includes confirming to the group that their engagement in the Integrated Transport Strategy has led activities in the transport programme which will address the lack of facilities and services for people with disabilities. For example, we are working closely with NRC to expand the Total engagement with the group is providing valuable insight into matters that need to be included in the new Engineering Standards.							
FNDC's current Water Supply Bylaw is due to be revoked on 16 October 2021; SPP staff, with support from IAM staff, have drafted an options paper for the Strategy and Policy Committ which will recommend that a replacement, albeit more specific and brief, water supply bylaw is created and approved prior to the revocation date. Key content of the revised bylaw wil restrictions on water supply schemes, in preparation for or times of drought. IAM staff will continue to work with SPP staff across the first half of 2021 to create the recommended revised of the revised bylaw.							
On-site water storage has been suggested as a possible solution to improve the resilience of the district's water supply schemes. SPP staff, with support from IAM staff, have drafted a b Committee meeting scheduled for 09 February, which sets out relevant work undertaken by FNDC regarding on-site water storage, and summarises the current stance of other local cou water storage to improve water supply resilience. This report is intended to be followed up later in 2021 with an in-depth report that analyses the problem of water supply resilience an water storage, along with other options, to improve resilience of FNDC's water supply schemes. IAM staff will be integral to the drafting of the follow-up report, and the completion of w demand forecasting work, will be required to inform the in-depth report on water supply resilience.							



New Connections and FNDC	New Connections and FNDC Consent Review										
Activity		December 2020	YTD '20	YTD '19							
Applications for new Water and Wastewater connections	♦ ₽	6	50	49	6 requests to connect to Council water and wastewater services were received in December 2020. Year to date Council h 53 last year)						
FNDC Resource Consent Applications Reviewed by IAM	All	35	335	184	IAM's development engineer and consents technician review all consents and provide comment on how to minimise/miti						
LIMs Assessed	All	117	1032	719	IAM's consents technician input into Land Information Memorandums by completing soil reports and assessing developm						

il has received 50 applications (compared to

nitigate impacts on Council infrastructure.

pment contributions.

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INFRASTRUCTURE COMPLIANCE

Oversee regulatory compliance for assets and infrastructure; lead and manage response plans in the event of enforcement action; assist teams around obligations in relation to the Resource Management Act.

The following provides an overview of infrastructure compliance with NRC issued resource consents including current abatement notices.

EXECUTIVE SUMMARY

Whāia e koe te iti kahurangi ki te tūohu koe, me he maunga teitei

Pursue excellence – should you stumble, let it be to a lofty mountain

The primary goal of the Compliance function within IAMs is to identify requirements and goals from a risk compliance and assurance perspective. It is also to provide sound expert advice and oversight with regards to risk mitigation and potential opportunities. Regulatory compliance, changes and adaptation are significant and a top priority. Guided by Far North District Council's values, this function's overarching goal is to use science, data, legislative requirements, and Mātauranga Māori to support decision making, to build transparency and trust and to create collective wisdom when addressing present and future risks to the organisation's Infrastructure and Assets.

Kerikeri WWTP – application for withdrawal of abatement notice update

A project update has been included earlier in this report with regards to the operational directives at the Kerikeri WWTP. The Northland Regional Council (NRC) had issued an abatement notice on 24 July 2019 with regards to noncompliance with conditions 8 and 9 of the current resource consent. Late November 2020, a request was submitted to NRC requesting an extension be placed on the current abatement notice until phase 6 of commissioning has been completed and three consecutive test results are achieved which is being achieved. This was positively received by Northland Regional Council, who has been working closely with the Far North Waters operations team and the Compliance over the course of the past few months. It is estimated that by the end of January, an application to withdraw the current abatement notice will be submitted.

Recruitment – Project Manager - Drinking Water Assessments

Also linked to the programme of works under the Crown's Three Waters reform package is the recruitment for a Project Manager primarily focused on developing and implementing Far North District Council's Water Safety Plans. This role will manage the development, implementation, and ongoing surveillance regime of approved Water Safety Plans, develop strong relationships with water supply operators, local and regional authorities, the Northland District Health Boards, and other relevant agencies. This role's main function is also to support the Infrastructure Compliance Lead as well as the Team Leaders of Asset Management and Infrastructure

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Planning to develop future investment requirements and improvements to maintain standards. Successful appointment will hopefully be announced by 15 February.

Positive winter 2020 macroinvertebrate monitoring results for Waiotemarama and Petaka streams

In accordance with the resource consent conditions for the water take permits in both the Waiotemarama and Petaka streams which Far North District Council hold is the undertaking of macroinvertebrate monitoring on a biannual basis. The purpose of this monitoring is to ascertain the long-term effects of the take on macroinvertebrate communities and water quality. Since 2013, Far North District Council has commissioned Wildland Consultants Limited to undertake this sampling.

Various hydrological and ecological criteria is recorded at each of the sampling points, such as:

- Water depth
- Composition of channel substrate
- Water flow rate
- Riparian vegetation
- Flow conditions
- Channel morphology

Results - Aquatic habitats and macroinvertebrate communities

Twenty-three aquatic macroinvertebrate taxa were recorded throughout all monitoring sites at Waiotemarama stream and twenty-two recorded at Petaka. The community compensation results are listed below in Figure 1 and Figure 2. The lower the percentage score represents the greater the tolerance of poor water quality.



Figure 1. Figure 2. Macroinvertebrate community compensation (%) - Waiotemarama

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Figure 2. Macroinvertebrate community compensation (%) - Petaka

Summary

This past winter's testing results demonstrated 'excellent' water quality properties and would indicate that for the monitoring round of winter 2020, there were no detectable adverse effects on the environment as a result of the water take permits on aquatic macroinvertebrate communities in both the Waiotemarama and the Petaka streams.

Drinking Water Standards – Monitoring strategy and Risk Reporting

Taumata Arowai's recent DRAFT 'Drinking Water Supply Operational Compliance Rules' <u>DRAFT drinking</u> <u>water supply Operational Compliance Rules (dia.govt.nz)</u> has set out the requirements that drinking water suppliers must meet to demonstrate that they are not exceeding the maximum acceptable values (MAV) for microbiological, organic, inorganic, cyanotoxin and radiological determinands which are set out in the 'New Zealand Drinking Water Standards 202X'. A determinand is a constituent or property of the water that is determined, or estimated, in a sample. The National Environmental Standard uses the term 'determinand' rather than 'contaminant' because it has a specific and narrower meaning, as defined in the Resource Management Act (1991).

These rules set out minimum compliance requirements for the supply of drinking water, and suppliers are advised that undertaking further measures depending on water supply circumstances and risks may be prudent.

In anticipation for these regulatory changes, early discussions are being held regarding a working group to be established between Far North Waters and FNDC with regards to preparing a monitoring strategy and program. Further details will be provided in next month's report.

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Summary of Abatement Notices

Abatement notices are one of the significant risks identified to Far North District Council (FNDC). FNDC currently has 6 outstanding abatement notices due to non-compliance with resource consent conditions for district infrastructure issued by Northland Regional Council (NRC). Strong and collaborative engagement with Northland Regional Council (NRC) and our Far North Waters Alliance (FNW) partners has been our focus in addressing present non-compliance and other risk profiles within the Three Waters space.

- L					
	Location	Asset	Asse Type	Non-Compliance	Action
		Kerikeri Sports Complex (Paid/Closed)	^	 Issued Dec 2016 Breach of discharge consent limit for wastewater discharge amount 	There have been no breaches of dis Plumbing repairs, meter calibration mitigate the risk of non-compliance
		Mangonui Handrail		 The abatement notice was issued in May 2018 Erection of a safety rail on the Mangonui boardwalk required 	As agreed by Northland Regional Co September 2018 in high-risk area. A boardwalk improvements. Initiation notice are actioned in January 2021
	Kaitaia Recovery Centre Handrail Kerikeri WWTP	Kaitaia Recovery Centre		 The abatement notice issued Nov 2018 Stormwater runoff from bins at site may contaminate waterway 	The Interceptor / oil separator has arranged with the Infrastructure Co Monitoring Officer to arrange an in
	Kaitaia WW Network Ahipara WWTP X2 Kerikeri Kerikeri Paihia WWTP	Opononi WWTP		• The abatement notice was issued in Apr 2016 due to the plant evidencing non-compliance with the E. coli limits.	Short term: aerator and desludging fencing of wetland area completed refurbishment costs to be input int and Options' plan which has been o available in January's report.
	Kaikohe Russell WWTP				Long term: engagement with the Co try and find an acceptable upgrade the consent renewal.
	Opononi WWTP	Kaitaia WW Network	Ş	 The abatement notice was issued in April 2016 due to unconsented network overflows Unconsented network overflows 	Screens have been installed at the work is underway to reduce freque been created to prioritise the creat
		Kerikeri WWTP (application to cancel after 18 December)	\$	 The abatement notice was issued in July 2020 due to a non- compliance with the wastewater discharge criteria. 	Kerikeri WWTP required to be com November 2020 to meet requireme target to meeting the 30 Novembe which will satisfy the requirements abatement notice and subsequent

on Underway

discharge volume since November 2018. ion and maintenance was undertaken to nce.

l Council, 80m of handrail was installed in a. A Resource Consent issued for tions to cancel the existing abatement 021

as been installed. A meeting has been Compliance Lead and the Northern inspection of the separator.

ing have improved E. coli readings, reed November 2019, wetland into next LTP. There has been an 'Issues in commissioned and an update will be

e Community Liaison Group continues to de solution before next LTP and alongside

ne overflow location and programme of Juency of overflows. An Action Plan has eation of a Leak Detection Plan.

ommissioned and operating on/before 30 ments of this abatement notice. FNW is on ber deadline of handover and completion nts under the conditions imposed by the nt withdrawal.

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	Asset			November Status				
Sites	Sites Group Abatement A		Abatement Resolved	Compliant	Detail	Comment		
Kaitaia	٢			•	Condition 7 – Unaccounted for water loss	A leak detection program will be developed from results of monitoring to address Unaccounted for Water Loss		
Kaikohe				•	Compliant			
Kawakawa	٢			•	Compliant			
Kerikeri	٢			•	Compliant			
Okaihau	٢			•	Compliant			
Opononi	٢			•	See Comments	Waiarohia Stream take: The planning of the reinstatement of gravel along the stream bed is underway. Waiotemarama Stream take: A 'Macroinvertebrate monitoring in the Waiotemarama Stream' report has been completed and submitted to l December in accordance with the requirements under the resource consent conditions.		
Paihia	٢			•	Compliant	THM levels were over 50% of MAV in December		
Rawene	٢			•	Condition 12 - volume supernatant discharged to Pioitahi Stream	The FNDC Infrastructure Compliance Lead will investigate the viability of using calculations for compliance purp There were no records of high turbidity during the month of December.		
Russell	٢			•	Compliant			
Ahipara	4			•	Condition 10 – Faecal Coliforms Condition 2	Inter stage testing commenced on 13 th July 2020. Weekly schedule samples have been taken from the inlet, co point. These results are being investigated by the Far North Waters (FNW) 3 Waters Engineer which will be disc Compliance meeting		
Hihi	Ę			•	Compliant	The project to upgrade plant is in its initiation phase. A flow meter has been installed on the outlet of the constructed wetland. DWF Status: Compliant		
Каео	Ę			•	Compliant			
Kaikohe	Ę			•	Condition 7(h)	The higher levels of E. coli resulting from scheduled sampling which took place in September are currently bein Waters Engineer. An update will be provided in January's report. DWF Status: Compliant		
Kaitaia	Ę	x		•	Compliant	The ' <i>Kaitaia Wastewater Network Improvement Plan</i> ' (overflow project) has been completed and awaiting ado January 2021. DWF Status: Compliant		

WATER AND WASTEWATER RMA COMPLIANCE REPORT – DECEMBER 2020

oss in early 2021.
to Northland Regional Council on 10
purposes. This will be actioned in 2021
constructed wetland and the final discharge discussed during the January FNW
eing investigated by the Far North Waters 3
adoption. A status update will be provided in

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				November Status				
Sites	Asset					Comment		
	Group	Abatement Issued	Abatement Resolved	Compliant	Detail			
Kawakawa	Ę			•	Compliant			
Kerikeri	Ş	x		•	Condition 8 – TSS, CBOD, TAN, E.Coli	The plant has operationally been handed over to FNW and regular sampling is taking place demonstrating cor underway. There will be discussions with Northland Regional Council in January to discuss the withdrawal of t The 'Ecological Monitoring Discharge' has been completed by Wildlands Consultancy Limited and submitted t Resource Consent condition requirements. DWF Status: Compliant		
Kohukohu	4			•	Compliant	DWF Status: Compliant		
Opononi	4	x		•	Condition 19 - TAN, E.Coli	An 'Issues and Options' report has been commissioned which has identified recommended upgrade options a The preferred upgrade strategy will support the resource consent renewal application. This is still underway. DWF Status: Compliant		
Paihia	Ş		x	•	Condition 9 – NH4 – N Condition 13 - pH	A performance and report and long-term solution proposal has been finalised which has now been sent to FN Delivery for approval. Further update will be provided in December's report. In the short term, the planned daily chemical dosing to adjust the alkalinity so that it falls within compliance b DWF Status: Compliant		
Rawene	-			•	Compliant	DWF Status: Compliant		
Rangiputa	-			•	Compliant	DWF Status: Compliant		
Russell	Ş			•	Condition 9 - infiltration efficiency report Condition 8 - land instability report	Condition 9 – The sampling of the monitoring bores for the purposes of reporting on infiltration was conducted the required infiltration efficiency report will be submitted alongside the January 2021 report. The annual written assessment report and instability risk is due early 2021. This is to ensure the discharge fro within or adjacent to the borehole disposal areas or on adjacent properties.		
Taipa	-			•	Condition 2 - discharge to ground	Continuing to operate under original resource consent conditions until the Environment Court appeal has bee DWF Status: Compliant		
Whatuwhiwhi	Ş			•	Condition 8 – Total Suspended Solids	The Total Suspended Solids (TSS) levels have sometimes been found to be non-compliant at the marsh discha Compliance Lead has initiated conversation with NRC resource consents team to enquire about a variation to limits which is scheduled to be early 2021. DWF Status: Compliant		

1. TAN - Total ammoniacal nitrogen

2. TN – Total nitrogen

3. DO – Dissolved oxygen

4. TSS – Total suspended solids

5. BOD – Biological oxygen demand

6. MAV – Maximum acceptable values

7. THM - Trihalomethanes

8. TP – Total Phosphates









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ASSET MANAGEMENT

Assets need to be planned, created, operated, maintained, renewed and disposed of in accordance with Council's priorities for service delivery for current and future generations.

The following provides an overview of key projects and deliverables the Asset Management Team are working towards. These are being delivered in conjunction with 'business as usual' work such as RFS's, operational matters and minor projects.

EXECUTIVE SUMMARY

December has continued to be a busy time for the Asset Management team. Key projects are;

- Continued work on the 3 Waters and District Facilities LTP
- Combined Asset Management Plan (AMP) for 3 Waters and District Facilities
- Implementation of the new Asset Management System (AMS) - IPS (INFOR)
- FY20/21 Capital Works Programme and scope delivery thereof and;
- Significant work on the template required as part of the 3 Waters DIA RFI response – due in on 01 February 2021

The Asset Management team continues to support the new Compliance Lead with embedding knowledge and relationship building with the team as well as with our Alliance partner FNW.

The team are working alongside the Infrastructure Planning team with contributing detail from the AMP for the 30 Year Infrastructure Strategy, and vice versa, to support the Long-Term Plan, including the Capital Programme development.

The team are also developing what the packages of work are for the Condition Assessment Programme funding for this FY as well as looking at procurement, as well as securing a project lead (with funding secured via the 3 Waters DIA Reform funding stream) for the next packages of work for funding secured through the LTP over the next 3 years – FY21 – FY24.

The team are also developing what the FY21/22 Capital Works delivery programme, and scopes required thereof, looks like.

The team are now on standby for auditors coming in w/c 18 January to 5 February 2021 to audit the LTP Capital Programme submission, consultation document and 'draft' combined AMP.

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Key: •	Complete	• In progr	ess • P	arked			Stormwater	District Facilities	Wastewater	Water
	Asset		St	tatus		Expected	Commont			
Activity	Group	Concept	Plan	Deliver	Handover	Completion	Comment			
Strategies / Plans / Policies										
Living Asset Management Plan (LAMP)	All	•	•			FY21/22		/ EMs by end of June 2021 (du Programme Darwin section fo	ue to delay with INFOR system imp r further details) .	lementation the time
Combined Asset Management Plan (3 Waters and District Facilities)	All	•	•	•		FY20/21		f a LAMP, and as part of the Lo available by mid-January 2021	ong-Term Plan (LTP) process, a com for audit purposes only.	bined draft Asset Ma
Asset Management Strategy	All	•				FY21/22		based on review being done f strategy in place by end of Jun	or the 30 Year Infrastructure Strate e 2022.	egy by Infrastructure
Annual Plan (AP)	All	•				FY21/22	Contribute to An FY20/21.	nual Plan project, coordinated	l by Strategic Planning & Policy. No	ot required again unti
Long-Term Plan (LTP)	All	•	•	•	•	FY19/20 to FY20/21	planning being co		he FY21/31 LTP in February 2020. The Auditors are due onsite to aud	
ISO55000	All	•				FY21		ed. This will align with the curr ata standards being developed	ent International Infrastructure M	anagement Manual (
Stormwater Strategy		•	•	•		FY20/21	February 2020. I		raft plan is in place and draft strate ng to hold workshops with SLT and hops as an overview.	
Stormwater Catchment Management Plans	<u></u>	•	•	•		Underway	Underway – FY19	9/20 to FY21/22 (3-year proce	ss)	
Vesting Assets to Council Policy	All	•				FY21/22	Consulted with A consulted in due		rocess is to be drafted / process m	apped. Other parts o
Asset Identification / Condition	Assessme	ents								
Prioritised Scheduled Asset Condition Assessments	All	•	•			FY21/31			ich amounts to a total spend of \$9r ould be out to market by end of Fe	
Inventory Assessment - DF Assets	• •••	•	•	•	•	Ongoing	n/a			
Major Project Pipeline – Initiati	ons - Inclu	des plannin	ng, feasib	oility studi	es, options	assessments, l	ousiness casing etc	. before handover to Project D	Delivery	
Hihi WWTP	Ş	•	•	•		FY22/23	been requested	through the LTP (FY21/31). Lil	eing applied for through Infrastruc kely additional funding estimate to astructure Committee (IC) meeting	be available by end c
East Coast (Taipa) WWTP	Ş	•	•			Under Appeal	consultation req		e consent. Initial upgrade and dispo appeal we don't know what this w	
Other										
Asset Management System	All	•	•	•		FY20/22	Full operational	use of INFOR ('Go Live') won't	be possible until September 2021	(please refer to Prog
Stormwater modelling requirements		•	•	•		FY20/21 – FY21/22	As per the SW Ca	atchment Management Plan (C	CMP) strategy, the models for SW v	vill take in excess of 2

10 February 2021

anagement Plan for 3 Waters and District Planning for the next LTP (FY21/31). The
eframe for the LAMP has been delayed). anagement Plan for 3 Waters and District Planning for the next LTP (FY21/31). The
anagement Plan for 3 Waters and District Planning for the next LTP (FY21/31). The
anagement Plan for 3 Waters and District Planning for the next LTP (FY21/31). The
anagement Plan for 3 Waters and District Planning for the next LTP (FY21/31). The
Planning for the next LTP (FY21/31). The
il FY21/22 due to current LTP work in
eing looked at in-depth and future asset
ogramme, as well as consultation
(IIMM) and will need to incorporate the
workshopped early in the new year, likely Infrastructure Strategy. It is likely the SW
of Council i.e. SPP, Legal and Finance will b
procurement package for the \$1.5 mil
Additional funding is required and has of December 2020. A report, with options
ent undertaken, further assessment and e. <i>Refer to Taipa WWTP Renewal / Appea</i>
rramme Darwin for full details).
2 years for full implementation updates.
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Кеу: •	Complete	• In progr	ress • P	arked					Ş	N atar
Activity	Asset		St	tatus		Expected	Stormwater	District Facilities	Wastewater	Water
Activity	Group	Concept	Plan	Deliver	Handover	Completion	comment			
Water modelling requirements	٢	•	•			FY21/22 – FY23/24	area at this stage		view the Kerikeri Water Network nding requirements to upgrade t contributions (DC) policy.	-
Wastewater modelling requirements	Ş	•	•			FY21/22 – FY23/24	growth area at th	is stage). Depending on the rev	view the Kerikeri WasteWater Ne view, funding requirements to up oment contributions (DC) policy.	
Area of Benefit Plan updates – Stormwater		•				FY21	To be investigated	d		
Data Cleanse / Tidy Up	All	•	•	•	٠	Underway	A continual proce	ess but aim to have it completed	l prior to Phase 1A implementati	on of the new AMS (N



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DISTRICT FACILITIES

Maintain Council parks, reserves, cemeteries, owned community and operated buildings, Housing for the Elderly, public toilets, town maintenance, contracted swimming pools and Solid Waste in accord with policy, strategy and legislation.

EXECUTIVE SUMMARY

December saw preparations being put into place for the increased levels of services across the district required for the peak summer season. This put considerable pressure on all within the DF Team as well as their contractors as all indicators point towards an incredibly busy holiday and summer season. This is due to the increased domestic tourism market and a heightened focus on the Far North as a prime destination of choice.

The Kaitiaki Ranger program has the new Te Hononga site, in Kawakawa, as the visitors "Gateway to the Far North" to help set the scene and provide valuable information to our visitors. This is then reiterated through the Rangers in locations such as Russell & the Karikari Peninsula using a handout flyer and conversations with visitors.

The Te Tai Tokerau Worker Redeployment funding initiative continues to track well, and this team were able to be utilised in the busy build up to the Xmas break.

Areas across the district continue to be considered and added to The Wildling Pine removal funding in areas of Council owned land.

MBIE Flood Relief Funded projects have been scoped with some being handed to the Roading Team and possible to David Clamps Project Team to deliver. The remainder of the projects will be delivered by the DF Team amongst their already busy schedules.

We are receiving and investigating increasing numbers of encroachments issues on Council land affecting mainly Council parks and reserves, esp. esplanade reserves.

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CUSTOMER EXPERIENCE PROGRAMME

Monthly District Facilities RFS numbers are:

		Jan	Feb	March	April	Мау	June	July	Aug	Sept	Oct	Nov	Dec	TOTAL
20	18	332	302	406	355	314	251	296	301	231	320	346	214	3688
20	19	392	360	466	423	486	440	401	359	428	431	451	381	5081
20	20	527	396	355	193	336	385	370	360	377	519	361	555	4734



District Facilities - Monthly RFS numbers

Monthly performance trend by Request Type Department District Facilities



Monthly satisfaction index and index of satisfaction with the action taken Index of satisfaction with the action taken ner satisfaction index (CSI) 100 100 **100 1**00 Index of satisfaction with the action taken (all) Customer satisfaction index (all) 100 89 90 85 85 85 84 86 82 78 77 80 75 75 73 70 70 60 Index 50 40 30 20 10 n May Jul Sep Oct Nov Dec Jan Feb Mar Apr Jun Aug Month request closed Number of responses included per month (shown in white) (N.B. Findings should be interpreted with extreme caution where the number of monthly responses is low) СТМА Source: CTMA's ongoing customer experience measurement programme (for period ending 31/12/2020)

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HEALTH AND SAFETY

Recreational Services

ACCIDENT TYPE	Jan '20	Feb '20	Mar '20	April '20	May '20	June '20	July '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20
Near Miss	0	0	0	0	0	0	0	0	0	0	1	0
Vehicle / machinery near miss	0	0	3	0	0	3	0	0	3	0	0	0
Non-serious harm	1	0	2	0	4	1	0	0	0	2	1	0
Serious harm	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle / Machinery accident incl. 3 rd party	0	0	0	0	0	1	0	1	0	0	0	0

OCS (Cleaning contractor for Council buildings)

ACCIDENT TYPE	Nov '20	Dec '20	Jan ' 21	Feb '21	March '21	April '21	May '21	June '21	July '21	Aug '21
Near Miss	0	0								
Non-serious harm	0	0								
Serious harm	0	0								
LTI	0	0								
Vehicle / Machinery accident	0	0								

Waste Management (Southern RTS)

ACCIDENT TYPE	Jan '20	Feb '20	Mar '20	April '20	May '20	June '20	July '20	Aug '20	Sept '20	Oct '20	Nov '20	Dec '20
Near Miss	0	0	0	0	0	0	0	1	0	0	0	0
Non-serious harm	0	0	0	0	0	0	4	0	0	0	0	0
Serious harm	0	0	0	0	0	0	0	0	0	0	0	0
LTI	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle / Machinery accident	1	0	0	0	0	0	0	0	0	0	0	0

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Northland Waste (Northern RTS)

ACCIDENT TYPE	Jan '20	Feb '20	Mar '20	Apr '20	May '20	June '20	July '20	Aug '20	Sept '20	Oct '20	Nov '20	Dec '20
Near Miss	1	1	0	0	0	0	0	1	0	0	0	0
Non-serious harm	0	0	1	2	1	3	3	0	0	2	1	0
Serious harm	0	0	0	0	0	0	0	0	0	0	0	0
LTI	0	0	1	1	0	0	0	0	0	0	0	0
Vehicle / Machinery accident	2	0	1	0	0	0	0	2	1	0	0	0

Non-serious harm:

• Staff member received Sprain/Strain to left Shoulder when throwing fadges into container – No first aid, no RICE applied

ACCIDENT TYPE	Jan '20	Feb '20	Mar '20	Apr '20	May '20	June '20	July '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20
Near Miss	0	0	0	0	0	0	0	0	0	0	0	0
Non-serious harm	0	0	0	0	0	0	0	0	0	0	0	0
Serious harm	0	0	0	0	0	0	0	0	0	0	0	0
LTI	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle / Machinery accident	0	0	0	0	0	0	0	0	0	0	0	0

Broad-spectrum (Russell RTS and landfill)

CBEC Eco Solutions (Waste education contract)

ACCIDENT TYPE	Jan '20	Feb ' 20	Mar '20	Apr '20	May '20	June '20	July '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20
Near Miss	0	0	0	0	0	0	0	0	0	0	0	0
Non-serious harm	0	0	0	0	0	0	0	0	0	0	0	0
Serious harm	0	0	0	0	0	0	0	0	0	0	0	0
LTI	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle / Machinery accident	0	0	0	0	0	0	0	0	0	0	0	0

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CBEC	(Swimming	Pools -	Kaitaia,	Kaikohe	and Kerikeri)
------	-----------	---------	----------	---------	---------------

Kerikeri Numbers							
Accident Type	Ocť20	Nov'20	Dec'20	Jan'21	Feb'21	Mar'21	Apr'21
Near miss							
Non serious harm.		3	6				
Serious harm							
LTI							
Vehicle / Machinery accident							

Non serious harm

- 01/11/2020. Female change room door slammed shut on girl's foot, cutting it, has been adjusted, it is very heavy for young patrons. Suggest we get these doors replaced, as they have been adjusted many times. Unresolved.
- 11/12/2020. Child cut heel on stone. Swept area. Heel plaster given. No further action required.
- 09/12/2020. Toddler banged head on side of pool. Ice pack and choc treat given. No further action required.
- 20/12/2020. Stubbed toe on uneven concrete. Band Aid applied. Concrete deemed ok. No further action.
- 12/12/2020. Child banged head while playing in pool. Pressure applied. Taken to doctor by parent. No further action.
- 27/12/2020. Girls change room door swung shut and cut the back of her heel. Still unresolved.
- 30/12/2021. Child running to jump off lower dive board, slipped and fell on pool edge. No further action.

Kaitaia Numbers										
Accident Type	Ocť20	Nov'20	Dec'20	Jan'21	Feb'21	Mar'21	Apr'21			
Near miss			3							
Non serious harm.										
Serious harm										
LTI										
Vehicle / Machinery accident										

Non serious harm

- 05/12/2020. Two boys banned for not exiting dive pool when it was closed.
- 14/12/2021. Suspicious character giving children ice-cream through fence, sent on his way.
- 19/12/2021. Faecal incident

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Kaikohe Numbers							
Accident Type	Ocť20	Nov'20	Dec'20	Jan'21	Feb'21	Mar'21	Apr'21
Near miss			1				
Non serious harm.		1					
Serious harm							
LTI							
Vehicle / Machinery accident							

Non serious harm

• 30/12/20. Paralyzed gentleman unable to exit pool, Mobile hoist required, suggested he contact social organizations for funding

RECREATIONAL SERVICES



Number of unscheduled works requested by RSL



Number of burials at Council public cemeteries

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Location	Feb '20	March '20	April '20	May '20	June '20	July '20	Aug '20	Sept'20	Oct '20	Nov '20	Dec '20
Kaitaia Transfer Station	97.45m3	56m3			103.4m3 13 bags 23 tyres	98.75m3	72.675m 3 4 bags	43m3	104.75m ³ 3xBags 1x Tyres	121 m³	191.1m ³ 4xBags 1xTyre
Whitehill s Transfer Station	129.44m 3	66.9m3			122.23m 3 33 bags	104.4m3	115.84m 3	130.6m3	153.98m 3	92.55m³	183m³
Kaikohe Transfer Station	83.2m3 & 3450kg	54.12m3 & 1910kg	NA due to COVID- 19	NA due to COVID- 19	79.9m3 3300kg	46.4m3 18 bags	36.2m3 4455.20 kg 1 bag	55.62m3 5810kg	98.41m³ 3xTV's 740kg	33.5m³ 8100kg	15.6m ³ 4500kg
Russell	28m3	3.5m3 & 15 bags			1.5m3	1.5m3	2.8m3	1.0m3	10.2m ³	4m³	17.2m ³
Kerikeri					-	-	7.2m3 12 bags	76.38m3	2.5m³	0	0
Whanga e	96.65m3	453.8m3			45.69m3	95.1m3	7.2m3 12 bags	76.38m3	50.6m³ 3xTV's	82.8m³	84.74m ³
Opononi		17.4m3			-	-	90.35m3	-		-	-

RSL Litter volumes disposed of at Council Transfer Stations





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RSL Audits

2020	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec`
Met	15	7	NC	NC	6	4	14	NC	16	10	6	0
Not met	0	0	NC	NC	2	1	2	NC	0	2	0	0
Non-performance Notice	0	0	NC	NC	0	1	0	0	0	0	0	0

Table 1: YTD audit results

December 2020 AUDIT DETAILS	Met	Not met	Non-performance notice	Not met comments
Reserve mowing	0	0	0	
Edge control	0	0	0	
Playground	0	0	0	
Cemetery	0	0	0	
Toilets	0	0	0	
Litter and Town Maintenance	0	0	0	
CONTRACT AUDIT				
Unscheduled	0	0	0	
Contract	0	0	0	
TOTAL	0	0	0	

The town maintenance pavement cleaning schedule is attached below as FYI. The table shows the frequency of cleans completed as per the contract by RSL. These frequencies are subject to change esp. when there are water restrictions in place. Clean types as noted below are:

- 1) Wash / scrub
- 2) Lift grates & clean channels in footpath centres

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Town	Area m2	Freq. per annum	Oct	Νον	Dec	Jan	March	May	July	Sept
Каео	1097	2	1			1				
Kaikohe	8500	3	1				1		1	
Kaitaia	3779	6	1		1		1	1	1	1
Kawakawa	1703	4	1 *		1*		1*		1*	
Kerikeri	3915	5			1&2	1	1	1&2		1
Moerewa	780	4	1		1			1		1
Paihia	1633	5	1&2	1	1&2			1&2		1&2
Rawene	617	2		1				1		
Russell	903	4		1		1		1		1

1 * no water blasting of Hundertwasser toilets and Gillies St cobblestone areas

PARKS AND RESERVES

Lindvart Park, Kaikohe

Security patrols over summer are being considered with plans to look at more robust fencing solutions. The bits which have been cut are the old, weak parts of the original council fencing.

Sportsville are hoping to work with the Community Board to find a suitable place for Moto X in Kaikohe to alleviate Lindvart Park from the issues being experienced

Jaycee Park – Kaitaia

Liberty Swing was installed just before Xmas. Due to a malfunction to one part of the swing which could pose a safety issue the swing could not be used over the Xmas period and has had to remain off limits to the public.

A basketball court was also installed at Jaycee Park just before Xmas, but the contractors were not able to erect the basketball hoop in time so safety fencing remained in place. Basketball hoop installed the week 5/01/2021 and safety fence removed.

General

Freedom Campers on Council reserves – five complaints were received, between the Xmas and New Year, concerning a group of vehicles with tents camping on Council Reserves. Their camping trip started at Tauranga Bay, moved onto Taipa and finally to Rangiputa.

PLAYGROUNDS

General

Softfall within most of the playgrounds in the district are low and requiring top ups or full replacement. The contract frequencies for playground inspections and releveling of softfall is set at monthly however this is not enough with most other Councils frequencies set at weekly or biweekly. Existing budgets do not meet current requirements for the extent of the softfall required and unbudgeted expenditure is likely to be needed to ensure compliance on all playgrounds.

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TREE MANAGEMENT

Various large Japanese Sheoak trees needed to be removed by Northland Tree-works situated on a Council walkway on Pa Rd Kerikeri as they were posing a threat to the Pagoda lodge. One of the stand came down in high winds narrowly missing the lodge and its quests.

These trees are showing signs of rot and decline possibly due to historic earthworks / soil level change.

Twin Bowl Kauri – Russell

Meeting with Department of Conservation this month held onsite to discuss options to ensure the significant Kauri are protected from Kauri Dieback. These trees are within the road reserve and may need to be registered as notable trees. The road is very narrow so the installation of culvert barricades could eliminate an option for visitors to stop and park hence reducing the potential of spreading the disease. Conversations with the roading team are in motion to erect barricades. No word from the Roading Team on the progress of this works.



Twin Bowl Kauri Location, Russell

CEMETERIES

No issues or concerns noted this month.

PUBLIC TOILETS

Toilet cleaning frequencies were increased for some of our toilets from 20th December through to 10th February 2021.

Due to the closure of the Mangamuka Gorge, Community Member Board Bruce Mills requested that the Kaeo Public toilets receive a twice daily clean to deal with the influx of visitors. Unfortunately, due to staffing issues, Recreational Services could only increase the toilet cleaning frequency to 5 days a week.

Northern Ward

Repair work to the toilet block at Whatuwhiwhi, Perehipe Bay, caused by vandalism (vehicle vs toilet block) was completed in time for the Xmas period.

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Klinac Lane, Waipapa

The issue with the Body Corp's sewerage treatment plant servicing these public toilets continues. The issues associated with this notice are the responsibility of the Body Corp to remedy however we have been required to pump out the toilet holding tanks over the Xmas period to ensure uninterrupted service to the toilets. There is a TIF funded project awaiting building consent approval to remove the public toilets from the Body Corps treatment plant and install an independent Council owned Onsite Wastewater management system.

General

COVID QR codes are still in place over the majority of our public toilets across the district.

Peak Season Second Serves.

All peak season second serves and portaloos, including a new site at Te Uenga bay out towards Rawhiti, are now in place to help with increased visitor numbers.

ENCROACHMENTS

Work continues to address the ever-increasing encroachment issues across the District.

Te Hue Bay –An agreement is currently being signed to include an existing slipway and picnic area on reserve land as community assets. A boat slipped on the reserve, as part of this encroachment, has been requested to be removed by the end of the summer period. Staff continue to monitor the progress of this and to date the owner has been proactive and helpful.

A dispute between a property owner and an owner of a dinghy, which is being stored on a Council reserve at the end of Wharau road, is ongoing. Discussion have been had with both parties and a coordinated approach is being sorted to ensure all members of the community feel free to access and utilise the reserve.

Several issues in the Te Wahapu area of Russell continue to progress.

2019/20 MBIE TE TAI TOKERAU REDEPLOYMENT FUND

A large amount of work across the district on parks and reserves have been completed using this funding stream. The following are programmed for completion;

- mulching projects in Kerikeri,
- New list of other noxious weed projects in Kaitaia has been provided
- Noxious weed growth in coastal areas targeting weeds,
- Follow up work in all areas to spray any new growth

2020/21 MBIE FLOOD FUND

District Facilities secured approx. \$500k to go towards resolving a number of areas that were affected by the recent flood event and other weather events. The areas involved include:

Scopes passed to the Roading Team to action on DF's behalf include

- Kaka Street ramp
- Moerewa (vacant section) between Otiria Road and Ranfurly Street) full clean of site

Scopes passed to the PGF Project Team to action on DF's behalf include are still awaiting confirmation of acceptance

• Kaeo Service Centre – stormwater remediation work

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• Opononi/Omapere foreshore erosion and vehicle access controls

Various Scopes to be managed by DF team

- Paihia waterfront beach clean
- Opua-Paihia walkway track work
- Pa Road, Kerikeri seal and stormwater remediation work
- Kaeo playground car park seal and stormwater remediation work
- Puckey Avenue Housing for the Elderly car park seal
- Kaitaia cemetery repairs to internal road repairs
- Hihi Beach remove trees along coastline that came down during weather event
- Te Wahapu walkway work
- Seaview Lookout, Paihia track work
- Jacks Bay track work
- Kawakawa Bowling Club seal and stormwater remediation work
- Wharau Road, Kerikeri repairs to boat ramp and surrounds
- Various Transfer Stations re-metal of areas washed away

2020/21 MBIE RESPONSIBLE CAMPING FUND

District Facilities has successfully secured \$249k again that will be used to run another lot of Kaitiaki Ranger programmes and the cost to operate these programmes and provide temporary toilet services. These programmes are run in conjunction with DOC – Kaitaia and NRC and will be based at:

- Karikari Peninsula
- Ahipara
- Kaimaumau
- Te Hononga, Kawakawa (new 'gateway to the north')
- Russell (new)

Temporary toilets are provided at:

- Unahi Wharf
- Lake Manuwai
- Rangitane Reserve
- Rawhiti

SOLID WASTE

FNDC Solid Waste Services Waitangi Community Recycling Centre

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An agreement, in principle, has been reached with Te Tii Trust to establish a community recycling centre on the trust's land in Waitangi. The nearest recycling facility is approximately 20 minutes' drive away in Whangae. Waste Management have provided a schedule of prices to operate and service the facility. The proposal is with FNDC management awaiting approval.

Ahipara Landfill leak

The Ahipara landfill has developed a slow leak at the northern end. The "patch" of imported then compacted clay has held over the Christmas break with no seepage observable in the New Year, however this is not the end of the problem. We still need to investigate the source of water ingress as the leachate level in the landfill is too high. The landfill liner is essentially designed like a shower tray (the bund height is only 600mm) with clay capping ("roof") over the rubbish to shed stormwater. The leachate level within the landfill is well over the lip of "shower tray" and the seal between the capping and the liner is all that is retaining the leachate. The landfill is not designed to work this way so we need to look into slowing water ingress and reducing the leachate level.

Clear Glass Acceptance

We were notified on December 15th that Visy's recycling facility (the only outlet for glass recycling in NZ) will be stopping deliveries of flint (clear) glass cullet from 16 December 2020 to 17 January 2021. Staff arranged for the temporary use of Northland Regional Council land with suitably bunded storage bays for the storage of glass during this shutdown period. Glass acceptance at Council facilities continued unaffected over the Christmas/New year period.

Month	Offence Details	Notice Number	Offence Date	Offence Type	Status	Balance	Location Details
Decembe r	RFS 4033650	5193	11/12/202 0	Deposited litter in / on public place \$400 >120L	Issued	\$400	Kiel Martin Tureia, Memorial Ave, Kaikohe 0405

LITTER INFRINGEMENT ACTION



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On-going discussions are being had with monitoring and compliance as the figures presented continue to be a small portion of the amount of illegal dumping material presented for investigation and issuing of fines.

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SOLID WASTE STATS







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ECO SOLUTIONS WASTE MINIMISATION EDUCATION

December

The festive season is approaching yet EcoSolutions has been keeping busy...

Events: our educators assisted the Kaeo and Kaitaia Christmas Parades with recycling lids, signage and community education around what is and isn't recyclable through conversations with the community around the zero waste kaupapa.

Event recycling is a clear message to the community that waste minimisation is now part of every celebration.

Schools: Lessons were delivered to children from Ohaeawai, Riverview, Doubtless bay & Kaeo schools making reusable bags as Christmas presents and swim bags. Room 7 from Kaeo school made bags to take all the excess fruit home for their whanau. Riverview finalised their paper making which has been made into Christmas cards for the parents.

Doubtless Bay Kindy made beeswax wraps for their Zero waste lunch kaupapa, bringing the message home that looking after Papatuanuku is the norm.

Businesses. Ākau in Kaikohe are awarded another Gold Ecostar award for their recycling efforts.

All EcoStar businesses have been approached and reminded how to have a low waste xmas.

Community: The beach clean-up in Taipa was a great success.

A roadside clean up in Kaitaia has been co-ordinated for the end of the month.

We have been running weekly zero waste xmas present and decoration workshops throughout the region.

Thanks to funding from the MFE for EcoStar we welcome a new educator based in Pakaraka this month, Roze Webster will increase our coverage in the lower FNDC region. Sharee Cawley also joined the team recently in Doubtless Bay. Thanks to the additional MFE funding we now have four part time environmental educators spread throughout the FNDC, and one more starting next year! This will enable us to reach more schools and businesses.







Coming up

We have initiated a call to arms for a clean-up at Rawene intersection, as well as a community action on how to keep the area clear from dumping. We will be co-ordinating with Te Hiku Timebank and the local schools on this.

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We have confirmed funding from MFE for an infrastructure project; Community Compost Connection, which will implement 12 small scale compost collection hubs as well as mentoring 1200 households to compost over the next three years, we will be seeking additional funding to increase the scope of this game changing project.

Online content:

For online information on EcoSolutions activities and posts please check out:

https://www.facebook.com/cbec.ecosolutions

https://www.facebook.com/wastewiseschools

SWIMMING POOLS

All three pools are open for the 2020/21 Summer season.

The Council has continued to provide financial support to the Ministry of Education owned pool at Northland college to ensure that the pool could open for the Christmas Holiday period.



Northland College Pool, Kaikohe, over Xmas break

Kaikohe Pool

Given the indeterminate nature of the leak in the Kaikohe pool it was decided to opt for a quick, short term repair to the pool surface which would allow other sources such as the sparge pipe to be eliminated.

Council agreed to pay for a check meter which will monitor ongoing water usage at the pool, allowing leaks to be identified quickly.

Major Works carried out at Kaikohe this month:

- Pressure wash and prepare pool surface prior to pool repairs,
- Repairs to pools structure,
- Repairs to concrete walkways to meet health and safety requirements,
- Maintenance and subsequent repair of chlorine pump.
- Repair leak in pump shed roof.
- Water check meter installed.
- Ballcock in balance tank replaced.
- Fix entry ladder to pool

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Planned works:

- Investigate leak to waste valve.
- Replace Mains switchboard.

Kerikeri Pool

The dive board was repaired early December and has enjoyed much use.

A minor health and safety incident occurred due to one of the changing room doors. KKHS have indicated that they have no money in budget for such repairs, but it should be addressed to prevent further injury.

Planned works:

- Pipe repairs within balance tank.
- Power socket not working on fence at end of main pool required for vacuuming pool deemed unsafe.
- Waiting on Engineers to fabricate new filter baskets and lids for main pool.

Kaitaia Pool

Council have been notified of incidents where customers have deliberately tried to breach the child to supervising adult ratio with the potential of putting children in their care at risk. These cases have been dealt with by the lifeguards/pool management as they have occurred, but it seems to be a worrying trend. Plenty of signage exists around the pools and customers are advised of the requirements on entry. Hapori intend to use their social media platforms to get the message across.

Works carried out this month: Replaced 2 security lights, old ones had rusted through.

Toilet and shower repairs completed as required

KERIKERI	Oct	Nov	Dec	Jan '21	Feb	March	April
Entries	36	221	865				
Concessions	62	587	1206				
Under 5	10	71	234				
Super A	13	106	133				
Spectator	27	329	535				
Lane Hire		85	160				
Event Hire			0				
School			0				
Total	148	1399	3133				

ADMISSIONS

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ΚΑΙΤΑΙΑ	Oct	Nov	Dec	Jan '21	Feb	March	April
Entries	182	577	787				
Concessions	144	541	845				
Under 5	48	169	340				
Super A	1	58	51				
Spectator	80	196	421				
Lane Hire	8	26	0				
Event Hire		482	362				
School	93	381	1029				
Total	556	2430	3835				

КАІКОНЕ	Oct	Nov	Dec	Jan '21	Feb	March	April
Entries			310				
Concessions			290				
Under 5			116				
Super A			18				
Spectator			99				
Lane Hire			0				
Event Hire			0				
School			0				
Total			833				

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REVENUE

KERIKERI	Oct	Nov	Dec	Jan '21	Feb	March	April
Gate	\$268	\$2,323.00	\$5,575.00				
Pool Hire		\$622.50	\$936.75				
Shop		\$54.00	\$83.00				
Total	\$268	\$299.50	\$6,621.75				

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ΚΑΙΤΑΙΑ	Oct	Nov	Dec	Jan '21	Feb	March	April
Gate	\$347.82	\$3,272.00	\$4,451.00				
Pool Hire	\$330	\$3,725.00	\$4,545.00				
Shop	\$18.20	\$205.60	\$319.00				
Total	\$696.02	\$7,202.60	\$9,315.00				

КАІКОНЕ	Oct	Nov	Dec	Jan '21	Feb	March	April
Gate			\$1,517.00				
Pool Hire							
Shop			\$12.00				
Total			\$1,529.00				

	Oct	Nov	Dec	Jan '21	Feb	March	April
TOTAL	\$696.02	\$10,202.10	\$17,465.75				

COMMUNITY / COUNCIL FACILITIES

OCS Audits

LOCATION	Nov '20	Dec '20	Jan '21	Feb '21	Marc h '21	April '21	May '21	June '21	July '21	Comment
Kaikohe Headquarters - Lockwood	96.7	96.9								
Kaikohe Headquarters – Annex and upstairs	96.7	96.9								
Kaikohe Headquarters – Publications	96.7	96.9								
John Butler Centre – Level 2	97.6	97.6								
John Butler Centre – Level 1	98.2	97.6								
John Butler Centre – Ground floor	97.3	97.5								
Rawene Service Centre	3/M	NA								

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LOCATION	Nov '20	Dec '20	Jan '21	Feb '21	Marc h '21	April '21	May '21	June '21	July '21	Comment
Kaeo Service Centre and Library	3/M	NA								
Procter Library	96.6	97.4								
Paihia Library	96.3	96.5								
Kaikohe Library	3/M	91.9								
Bay of Islands Information Centre	96.9	97.4								
Hokianga Information Centre	3/M	98.0								

Lake Ohia Community Hall

On-going discussions continue with representatives from the hall committee. The committee have recently installed a 'swimming pool' type fence close to the SH road area as a means to protect children as part of their plans going forward. RSL will be engaged to do a spray of the outdoor area as per the Community Hall's policy.

Opononi RSA Hall

Discussions continue with the hall committee concerning a number of repairs and maintenance issues with improvement and development ideas being presented by the committee.

Te Hononga, Kawakawa

The Kawakawa Hundertwasser Trust have been engaged to not only cover the cleaning of the facility including the toilets, new and existing, but they have also secured the mowing of the reserve and looking after the gardens and carpark space to ensure it remains clean and tidy.

Since opening, there have been regular issues with the toilets becoming blocked. This is being monitored to decide whether this relates to an actual plumbing issue, the type of toilet paper is not suitable, users are causing the block, the type of pans installed may be causing the issue or something else.

Okaihau Hall

Hoskin Civil have provided a condition assessment of this site including issues with paint work that continues to bubble. Contractor to provide quote by end of February 2021. The issue with the blocked stormwater drains have been assessed and a quote received which should see the stormwater drainage connected to the kerbside outlets. Works expected to start in Jan/Feb 2021.

Horeke Hall

A new Onsite Wastewater Treatment system installation combining the Horeke Housing for the Elderly Village and the Horeke Hall/public toilets to the same system is nearing completion, with a few minor aspects outstanding prior to project handover the District Facilities Team

Unfortunately, the water pump servicing the hall was recently stolen for the second time in approximately a year and a half. The option to moving the pump to a more secure location, under the stage, is to be included in the project to install new water tanks at the hall.

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HOUSING FOR THE ELDERLY

Council own and maintain 147 Housing for the Elderly Units at 12 locations within the district. Unit information is as follows:

		Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
		0	1	2	0	1	3	1	0	1	2	2	0	0
# units acated torived for furbishing)	Northern:			Puckey Ave			Awanui, Oxford Street	Awanui		Puckey		Kohukohu		
	Western:		Rawene				Rawene				Kaikohe, Rawene	Omapere		
> <u>5</u> 5	Eastern:													
		6	6	5	5	4	4	7	7	6	7	6	8	8
unit shments essing	Northern:	Oxford Street						Awanui, Oxford St	Awanui (2), Oxford St	Awanui (2),Oxford St	Awanui (2), Oxford St, Puckey	Awanui (2), Oxford St, Puckey	Awanui (2), Oxford St, Kohukohu	Awanui (2), Oxford St, Kohukohu
# unit efurbishme progress	Western:	∀aima, Kaikohe	Waima Kaikohe (3) Rawene	Vaima Kaikohe (2) Bawene	Waima, Kaikohe	Waima Kaikohe (2)	Vaima Kaikohe (2)	Kaikohe Rawene, Waima	Kaikohe (2), Rawene	Kaikohe (2)	Kaikohe (3)	Rawene, Kaikohe	Rawene, Kaikohe, Omapere	Rawene, Kaikohe (2), Omapere
2	Eastern:	Kawakawa	Kawakawa	Kawakawa	Kawakawa	Kawakawa	Kawakawa	Kawakawa	Kawakawa	Kawakawa				
		2	1	2	1	0	0	0	1	1	1	3	0	0
# units completed (returned for tenanting)	Northern:	Oxford St		Puckey Ave	Oxford St							Puckey		
# comp eturr enar	Western:		Kaikohe	Bawene					Waima	Rawene		Kaikohe (2)		
5 <u>e</u> e	Eastern:										Kawakawa			

Healthy Homes Regulations

Council's requirements to meet these government regulations are currently being scoped for project delivery.

Omapere

HFE project works completed in December work included draft stopping, installation of heating and replacement of remaining wooden window frames with Aluminium.

Waima

Due to the ongoing failure of the water sampling at this facility, urgent remedial repairs to the existing water tanks and filtering system have been completed and is expected to last for up to two years. Replacement water tanks, which were procured as part of the recent drought response, may still be required to replace the existing aging concrete tanks.

Kaikohe

Quotes have been received to convert bath to accessible shower due to gradual water damage to the bath surround. Contractor to be engaged by end of Jan 2021.

Kaitaia - Puckey Ave

MBIE Funding has been approved to re-seal the Puckey Ave Cal-de-sac. Scoping is currently underway for this work.

NOV	To do	Applicant	District Facilities	Legalisation Services	Negotiating	Ready for signing	Completed this month
Western			Opononi Statue Agreement	JAN: Opononi Bowling Club Lease (new)	OCT '20: RAD Lease - contact had and areas that need addressing have been received.		
			OCT '20 Northland College - Swimming Pool MOU (renew). On hold while focusing on viner programme so pool can open in Dec.	JAN: HokiangaCoastguardLease(new)	NOV '20 Ravene Campus MOU with Te Puna o Kupenuku (potential lessee). This MOU is focused on the relationships (review only)		
				JAN: Hokianga Treks	NOV "20 Ravene Campus Lease vith Te Puna o Kupenuku (potential lessee). Nev and needs to align to the MOU and clearly 10 roles, responsibilities and liabities etc.		
Eastern	Kerikeri College - Swimming Pool MOU (review)	AUG '20: Russell Sports Trust Lease (renewal)	OCT '20 Cherry Park House - discussions underway to consider future structure of management committees [involves SP&P]	OCT '20: Rolands Wood - signed agreement received from FDRWT. Matter will proceed to the High Court to change over the Trust Deed.	ONGOING: Walls Bay (Doug Smuck)	NOV ' 20: Whangaroa public toilet water supply agreement with the marina being negotiated.	NOV '20: Various volunteer agreement signed. Report being prepared for presenting to the Community Board. (Volunteer Agreement)
	NOV "20: Bledisloe Domain Agreement – meeting organised with Waitangi Trust in Feb "21re future use and availability.	SEPT '20: Russell Tennis Club - contacted by Club - discussing need for a formal arrangement	AUG '19: Kavakava Memorial Library Hall Lease (renewal?)		ONGOING: Kerkeri Sports Complex Lease (new)		NDV "20: Vision Kerikeri Wairoa Stream (Volunteer Agreement)
	NOV "20: Waipapa public toilet agreement (on hold)		NOV '20: Te Hue Bay Agreement to permi a pionic area and slipway to remain in place for use by the public. On hold until the new year.				
	NOV "20: Paihia Village Green: this years market on hold due to the impact of COVID and no cruise ship visits.						
	NOV '20 Cherry Park House - discussions underway with EM's and staff to look at a future structure of management committees			Investigation: * Tauranga Bay - water easement Agreement (new due to expiry)			
Northern	DEC '20: Te Hku Sports Hub land lease (meeting to be held)	JAN '20: Te Rarawa Rugby lease (new)	ON HOLD (June): Kakaia Saturday Market Agreement (on hold)	JAN '20: St Johns Ambulance Ahipara Lease (renewal)	DEC '20: Waiotaraire Reserve - public toilet water supply agreement (new). Update received confirming applicant happy just a few amendments needed	OCT '20: APRI - Unahi Wharf Agreement	
	DEC '20: Mangonui Netball Club. Request to issue a new lease received however relates to the Te Hiku Sports Hub development (meeting to be held)	JAN '20: Hihi Community Centre Lease (new)	JAN '20: Te Kao - public toilet Agreement (new)	JAN "20: Te Kohanga Reo o Houhora Lease (nev)	DEC '20: FEN2 Karikari 28 Maitai Bay Road (Rob Koops)		
		NOV '20: Kaitaia Plunket Lease - new premises being sought as building found to be unsuitable and in need of major work.		FEB "20: Tumanako o Kaitala Kohanga Reo Trust (new)			
Other	Far North Holdings - property agreement						
	SP&P to do: * Paihia Village Green Management Plan						

LEASES / AGREEMENTS

Volunteer Agreements

Agreements have been sent out to several volunteer groups around the district to work on reserves and / or dune restoration. To date this includes Vision Kerikeri, Russell Landcare and the Kerikeri Walkways group as well as a group led by Ngati Kawa who want to plant the Lily Pond Reserve along Waitangi River and the Kaha

Place Walkway Group looking to install a walkway down to the bay on Council land.

Whangaroa public toilet water supply agreement

An agreement with the Whangaroa Marina to supply water to the public toilets has been sent for review and finalisation.

Cherry Park House

Issues continue to be raised concerning the groups involved with this facility. Ideally a lease is established as this facility does not fit within the current hall strategy. However, this outcome is not likely in the near future. Also, Council has been paying for this facilities power account for a number of years. This matter is being worked through. Options are also being considered around the moving of the pottery kiln from the lower level into a more accessible area.

Te Hue Bay, Russell

An agreement has been signed with locals in the bay to include the picnic area and slipway as community assets to be maintained and used by the residents of the bay. The issue of the boat up on the reserve is also being worked through and expected to be removed by the end of the summer season.

PPROVINCIAL GROWTH FUND (PGF) ROADING

EXECUTIVE SUMMARY

In August of 2020 MBIE granted \$20.7 million to undertake works on three strategic roads in the Far North District. The projects are split in two, with Peria Road and Ngapipito Road combined into one package (Priority 1 Roads) and Ruapekapeka Road being the other. Planning commenced immediately, with early site investigation and testing setting the projects up for the best outcomes from the start.

The delivery milestones required to achieve the dates set out in the funding applications are very tight and will require some accelerated processes and innovative delivery methods. All three projects will be delivered with a staged programme; design for initial stages will allow earlier construction, with design of subsequent section continuing concurrently. Early enabling works have set the project teams up well to achieve construction deadlines. Our procurement approach for all three projects has been approved, allowing the contracts to move forward.

December has seen the first of five sections sealed and completed on Peria Road, with another soon to follow and the other sections at various stages of construction and enabling works.

Both Ruapekapeka and Ngapipito Roads have experienced delays in commencing physical works on site before Christmas, but they are on track to start in January.

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SUMMARY - DECEMBER

Priority 1 Routes

Peria Road

Peria Road is a 6.3km seal extension and associated works. It is being delivered through the existing NTA North Area Road Maintenance Contract by Fulton Hogan.

Good progress continues onsite with construction works. Peria has been split into 5 sections, with staging of works on each section allowing multiple sections to be in construction at once (once enabling works on section one have been completed, the team can move to section two and so on).

Section 1 was sealed before Christmas and the sealing of section 2 is planned for January.



Sealing and linemarking completed at Peria on Section 1

Ngapipito Road

Ngapipito Road is a 5km seal extension and associated works. It is being delivered through the NTA South Area Road Maintenance Contract by Broadspectrum, now Ventia.

With the amount of work being undertaken in the 20/21 construction season, we highlighted design capacity as a risk early on in the project. Unfortunately, Ventia have experienced delays with completing the design phase and have slipped 2 months in their programme for commencing works. The design has now been submitted and is currently being reviewed and approved by NTA. Construction is programmed to start in January 2021.

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Bridge upgrades

WSP have now completed the bridge investigation and assessment works. There are 21 bridges affected by this project. They have all been inspected and assessed by bridge engineers. Some of this investigation works required destructive testing (cutting sections of the bridge to establish reinforcing details etc.)

It is pleasing to note that only 6 bridges will require physical works to strength them to the HPMV standard for heavy truck movements.

The next stage is design work for the 6 bridges, followed by construction works.

Ruapekapeka

For the Ruapekapeka Road project, we have engaged Ventia as the Early Contractor Involvement (ECI) supplier and delivery of Stage 1 construction through the South Area Maintenance Contract. The proposed delivery mechanism for the balance of the Ruapekapeka Road works is to utilise the NZTA Northland Delivery Framework (NDF) Lot 2 Suppliers, via a closed tender for construction. The design is 90% complete, and the tender is expected to be released in February 2021.

Stage 1

There have been unforeseen delays with consenting and archaeological authority requirements, which have impacted on our ability to commence earthworks and drainage on Stage 1. The archaeological authority has now been granted and required intensive consultation with Heritage New Zealand and DoC to reach an agreement on project outcomes.

We are ready to start once we have the final FNDC consent, which is subject to a signed agreement between FNDC and Te Ruapekapeka Trust. This agreement was on track to be in place before Christmas, however on 16 December Allan Halliday, chairman of the Ruapekapeka Trust, passed away. This is a huge loss to the local community; Allan was passionate about environmental management and working for and on behalf of his marae and iwi in the Northland area.

We are confident that this agreement will be signed off in January.

Subject to finalising the agreement, construction will commence in the New Year, but will stop for the Commemoration event on 3 February 2021.

Stage 1 works will be completed in March.

Stage 2

The proposed delivery mechanism for Stage 2 is to utilise the NZTA Northland Delivery Framework (NDF) Lot 2 Suppliers, via a closed tender for construction.

Design work has continued as planned on Stage 2, including the SH1 intersection improvements. The completion of stage 2 works by June 2021 was flagged early as a high risk of not achieving this milestone. This was highlighted again with MBIE representatives in December and they support the drafting of a variation to the funding agreement with a new completion date of December 2021.

PROGRAMME OVERVIEW

The current programme aligns closely with the deliverables specified in the project agreements shown in the following tables. As detailed in the project summary we have programme slippage with Ngapipito and Ruapekapeka Roads.

The deliverables for Payment #1 were achieved for both projects, unlocking the first claim value of \$500k in August. Monthly claims are now processed through NZTA's TIO system.

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Priority 1 Roads Programme Milestones							
Deliverable	Original Completion Date	Expected Completion Date	Status				
 Funding Agreement executed by both parties. Investigation and design underway. Stage 1 construction underway. Enabling works (vegetation clearing, earthworks, widening and drainage) commenced before 1 September 2020. 	August 2020	Achieved					
ECI agreement in placeStage 1 investigation and design complete	30 September 2020	Achieved					
Stage 2 design completeStage 2 construction underway	31 December 2020	January 2021					
Stage 2 construction complete	31 March 2021	April 2021					
 Final completion of surfacing MSQA reporting and monitoring paperwork 	30 June 2021	June 2021					

Ruape	kapeka Road Programme Milestones	

Deliverable	Original Completion Date	Expected Completion Date	Status
Funding Agreement executed by both partiesInvestigation and design underway	August 2020	Achieved	
 ECI agreement in place Stage 1 investigation and design complete Stage 1 construction underway. Enabling works (vegetation clearing, earthworks, widening and 	30 September 2020	Achieved	

NOTE: Major earthworks for Stage 1 construction have been unable to start due to delays with consenting and archaeological authority requirements. The programme was already tight and this will put us a month behind, which will have a knock-on effect on the completion date.

Stage 1 construction completeStage 2 design completeStage 2 construction underway	31 December 2020	February 2021	
Stage 2 construction complete	31 March 2021	November 2021	
• Final completion of surfacing	30 June 2021	December 2021	

KEY RISKS AND OPPORTUNITIES

The following programme risks have been identified and are being actively managed:

- The upcoming 175th anniversary commemoration events planned for 8, 9 & 10 January and 3 February 2021 are very important and significant events that we must plan around and will likely disrupt progress at Ruapekapeka around that time.
- The passing of Te Ruapekapeka Trust chairman, Allan Halliday, may result in short term disruption in communications with the Trust due to mourning and the period of adjustment following.
- The completion date for the Ruapekapeka Road project has been reassessed and is now programmed for December 2021. MBIE have been informed and accept the changes, with a variation to the contract being drawn up.
- There were potentially up to 21 bridges across the strategic roads that could need significant strengthening works. Early and intensive investigation of these has identified that only 6 will require physical work to strengthen them. This has allowed commencement of bridge design works early in the programme to facilitate timely completion.

STAKEHOLDER COMMUNICATION

In the case of Ruapekapeka Road, there are a significant number of stakeholders involved with the scope of work near the Ruapekapeka Pā site and the proposed intersection improvements with respect to safety and tourism at State Highway 1. We continue to work closely with Te Ruapekapeka Pa Trust and have fortnightly meetings with representatives from the Trust.

Partners and stakeholders involved in these projects include;

- Iwi/Hapu Ngāti Hine, Ngāti Hau, Ngāti Manu and Te Kāpiti
- Te Ruapekapeka Trust
- DOC
- Geometra (Archaeological Specialists)
- Heritage NZ
- NZTA
- NRC
- Affected landowners

All stakeholders and affected parties are in full support of this project. Te Ruapekapeka Trust also have funds approved to develop the Pā site and enhance the entrance to Ruapekapeka Road with a proposed Pou and Waharoa near the intersection of State Highway 1, so it is critical that we work closely together on these projects.

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TE HIKU O TE IKA REVIATLISATION



The \$7M Te Hiku Revitalisation Project has been funded by the Shovel Ready Infrastructure Projects. This fund aims to provide an immediate boost to industries who have been greatly impacted by COVID-19.

This project consists of multiple smaller projects, including new shared paths, cultural art structures, playground and park improvements, streetscape works in Kaitaia, Awanui and Ahipara.

Overall, the project aims to provide:

- An immediate extra demand for design services for local / national consultants and surveyors, all of whom are facing reduced workloads due to Covid-19.
- Local suppliers concrete plants, quarries for aggregate material, building materials merchants, native wood for carving, local eco-sourced plants, design and signage suppliers for the info plaques and art pieces in the streetscapes and along the shared paths.
- A substantial portion of work in terms of size and cultural significance for the local iwi in the area, artists and carvers – Maori employment from local Iwi and apprentice artists and carvers.
- A wide range of construction work suiting local contractors and supply chains, local contractors are encouraged to employ unskilled workers to upskill – concrete layers, labour for plantings, labour to establish recreation equipment within open spaces, machinery operators, new apprentice concrete layers, engineering and designers for specific design of the cycle trail location etc.
- Continuity of work for council technical staff.

This scope of works has been funded with the expectation that the project be completed by June 2022.

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SUMMARY - DECEMBER

This project is largely being delivered by the community and guided by a local Project Working Group. Due to the reporting, programming and procurement requirements, it will be overseen by Kevin Hoskin, on behalf of FNDC. The reporting associated with Shovel Ready projects will be similar to that required for Provincial Growth Fund projects, although there is a greater level of detail required on a monthly basis for Shovel Ready Projects, to show progress against social outcomes and local economic benefits etc.

December has seen weekly meetings continue with the Project Working Group to better define the scope of work and programme to ensure the things that can be done early are being started early. Consultation, concept designs, cost estimates and survey work for all projects have been completed.

PROGRAMME OVERVIEW

The current programme aligns closely with the deliverables specified in the project agreements shown in the following table.

The deliverables for Payment #1 were achieved, unlocking the first claim value of \$3.5m in November.

► Te Hiku O te Ika		
Deliverable	Completion Date	Status
• The agreement executed by both parties. Project is 'shovel ready'	30/10/2020	
 Surveying, detailed plans and preparation for works at Ahipara, Awanui and Kaitaia. Recipient to provide evidence to the Ministry that the previous instalment has been spent. 	28/02/2021	
 Awanui carpark & playground underway Ahipara carpark & playground underway Recipient to provide evidence to the Ministry that the previous instalment has been spent and that the consent has been granted. 	30/05/2021	
 Kaitaia Town square and market square complete Streetscaping completed Ahipara, Awanui and Kaitaia Pump park completed in Kaitaia and Ahipara Recipient to provide evidence to the Ministry that the previous instalment has been spent. 	31/08/2021	
 Awanui carpark and playground completed Ahipara carpark and playground completed Cultural Art erected Awanui Jetty completed Ahipara walkways completed 	30/11/2021	
All works completed and project finishes	30/06/2022	

STAKEHOLDER COMMUNICATION

This project is all about achieving Broader Outcomes for the Far North community, with aims for specific outcomes detailed below. The project team have spent a significant amount of time undertaking consultation prior to the project starting to understand and manage expectations. There are also regular updates in the local newspaper.

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Social Procurement

FNDC and the project team will assist local, smaller contractors to develop the systems required (including Sitewise accreditation) to ensure safety, quality and accurate reporting of outcomes. Active management of social procurement processes will ensure these outcomes are achieved. Currently all direct awarded work has been to local businesses (i.e. Surveyor, concept design, consenting advice).

Local Iwi partnerships

The project working group includes local Kaumatua who liaise with local lwi for creation of cultural art installations.

Displaced workers

Workers from both the tourism and forestry industries could be re-deployed to this project. The nature of employment to be created would be clearing of vegetation, driving of diggers and machinery that previous forestry or construction labourers could undertake. Preparation works for the shared paths and path formation could be undertaken by previously unemployed persons that will be upskilled over the duration of this project.

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CIVIL DEFENSE EMERGENCY MANAGEMENT

Providing leadership in reducing risk, being ready for, responding to and recovering from emergencies.

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NATIONAL

The allocation of Ministerial portfolios has been confirmed. The (Hon) Kiri Allan has been appointed the Minister for Emergency Management. In doing so the Government has renamed the portfolio "Emergency Management" instead of "Civil Defence". The change in portfolio name does not reflect the Ministers responsibilities under the CDEM Act 2002.

Changing the portfolio title to "Emergency Management" signals the Government's intention to systematize the identification of, planning for, mitigation of, response to and recovery from national and local level hazards and risks. It strengthens awareness of emergency management as a vital function of the national security system.

NORTHLAND CDEM GROUP

Mayoral Relief Fund - July Flood Event. The Ministerial visit to Northland by Hon Peeni Henare after the storm event in July 2020 resulted in the announcement of a \$30,000 fund (incl GST) to be donated as a Mayoral Relief Fund for the region, administered by the Northland CDEM Group to assist whanau facing significant hardship. Funds have been allocated to support 28 whanau across the region who experienced hardship as a result of the flood. The fund was used by recipients to replace flood damaged household goods and personal items which included beds and bedding, whiteware including contents of freezers, curtains, drapes, carpets and clothing. There is currently \$96.96 of funding remaining.

Distribution of funds

District	No of Grants Paid	Value
WDC	9	\$5,790
FNDC	19	\$20,200
	Total Allocated	\$25,990.00
	Balance	\$96.96
	GST	\$3,913.04
	Total Fund	\$30,000.00

Having a centralised fund worked well for a across-district event. The process implemented ensured that applications for funding were processed expediently and were paid to applicants the next working day following applications being received.

Drought Recovery Grant – Northland Drought 2020. On 25 May, the Ministry of Primary Industry (MPI) made \$250,000 available to help Northland famers mitigate the financial effects of the Northland drought. Centralised with NRC, the grant was made available through a robust claims process.

The claims were received over a 15-week period, with the last claims approved for payment on 16 October and the last of the funding distributed. This fund is now closed, and we acknowledge MPI for the financial support provided from which we have been able to assist 71 farmers in our region as detailed below.

The table and graphs included show the distribution of the Drought Recovery Grant for Northland by district and farm type.

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District	Dairy	Beef and Lamb	Amount
Far North	16	1	\$ 68,156.76
Kaipara	22	3	\$ 77,139.45
Whangarei	27	2	\$104,703.78
Total allocated	65	6	\$250,000.00
Balance	-	-	\$ 000.00
GST	-	-	\$ 37,500.00
Total	1 1	-	\$287,50.00

Drought Recovery Grant - funding allocation by district







Northland Drought Plan - Due to Northland experiencing in early 2020 one of the most severe droughts on record, the Northland Civil Defence Emergency Management Group have developed in collaboration with

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agencies, organisations and stakeholders a Northland Drought Plan. The intent of the plan is to identify roles and responsibilities which can mitigate as much as possible, the impacts and response activities to water shortages in the region. The plan includes:

- The current NIWA weather outlook for the next three months.
- Risks for the region associated to water shortages.
- Triggers for a drought emergency response by Northland CDEM.
- Roles and responsibilities of agencies, organisations and stakeholders regarding water shortages.
- A set of scenarios which identify possible tasks carried out by the responsible agency, organisation or stakeholder in response to a drought.

The plan went out for consultation and approval to the agencies, organisations and stakeholders included in it. Feedback was received and the plan updated accordingly. With approval and input from agencies, organisations and stakeholders a coordinated and coherent across agency readiness and response framework for a drought in Northland will be in place.

COVID19 Regional Resurgence Plan - The Northland CDEM Group has been working collaboratively with region-based agencies and the national planning team who are developing the national COVID-19 Resurgence Plan. The COVID response group within the Department of the Prime Minister and Cabinet has established a work programme to provide a more informed response to any future COVID-19 incidents. As part of the planning a local workshop has been held with CDEM agencies and stakeholders.

Niwa (National Institute for Water & Atmospheric Research) has released its forecast for summer. Air temperatures across the country, but more so in the North Island, were forecast to be above average but that would come with some elevated humidity and increased risk of flooding, especially in the North Island (and northern South Island.) The risk of cyclones was elevated this summer, i.e.; November to April.

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TE TAI TOKERAU WORKER **REDEPLOYMENT** PACKAGE -MONTHLY REPORT



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Location and Region:	Te Tai Tokerau\Northland				
Contracted Amount:	\$9.32 million				
Report Date:	For the month ending 30 November 2020				
Programme Outcomes:	 prioritise the employment of local workers displaced by the COVID economic crisis; occur at pace, time being critical; and assist in meeting the social procurement objectives agreed between the parties 				

1. Project Updates

Provide description and analysis of actual against planned progress of each Project Element to show that the Project is occurring at pace.

Notable Events occurring in December:

Health & Safety Event – Kaipara District Council Tree Felling Activities:

On Thursday 10th December an employee of a Ventia engaged sub-contractor (Team Vegetation) suffered a finger crush injury while operating a chipper winch resulting in the tip of the crushed finger requiring amputation above the last knuckle.

Team Vegetation have notified WorkSafe and a full investigation is underway. The employee involved is believed to be an experienced employee (not a newly redeployed worker) and by all accounts is recovering well.

Environmental / Public Image Event – Far North District Council Noxious Weed Spraying:

On Friday 11th December the Northern Advocate published the article below article following complaints by local Russell community members that roadside weed spraying activities undertaken as part of the Worker Redeployment Programme had negatively impacted nearby native and non-noxious vegetation specifies. This followed a similar complaint (involving a different spray contractor) in Waimate North earlier in the program

FNDC and Contractor staff completed and inspection of the area and while minor evidence of overspray was noted it was felt to be a result of wind drift or overspray as opposed to blanket indiscriminate spraying as had been claimed. FNDC's investigation findings where provided to the reporter at The Northern Advocate and were incorporated into the article.

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2.	Roading sightline improvements and vegetation clearance	Work for this funding item was completed in November 2020.			
3.	Roadside litter collection and clean-up	Now completed - since launching the Provincial Gro November, up to 20 tons of litter has been remove signs have been installed at litter hot spots at locat those shown below.	d from roadsides, and 21 anti-litter		
		Before	After		
4.	Removal of known Roadside hazardous trees	 FNDC – Work on this funding item now complete WDC – Good progress on several sites - 18 large and roads have been felled, the site cleared, fences reparroads have been felled, the site cleared, for traffic management and 3 tree removed on the second state of the s	aired, and debris formed into "burn" piles Crows Nest Road. inued through December with sites oved by one T8 Tree Services crew (4		

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		 Approximately 4 large pine trees were removed during December, with one crew across 2 days (4 in traffic management / 3 in Tree removal). Griffin Road, Paparoa
		 O'Rourke and Sons Logging utilised their forestry resources to remove several very large trees across 8 sites
5.	Removal of self- seeded roadside	FNDC - Self-seeding trees been removed (and sprayed where appropriate (work completed at Ridgen Road & Te Ahu Ahu Road
	trees	WDC – Minimal work completed on this activity in December
		KDC – Continuation of the removal and chipping of smaller scale self-seeded plants throughout the Waihue Road site over 4 days.
6.	Roadside litter collection and clean-up	FNDC - The roadside litter pick up crews are finish the roads programmed. Through December the southern team have completed Wiroa Rd and Waiare Road while in the Northern area Fulton Hogan have completed Kaiatia-Awaroa Road.
		WDC - litter collection commenced on Riverside Drive.
		KDC - Crew has been maintained as two committed females to provide extended employment for the duration of the funding period. During December they removed 5 tyres, and 146 bags of rubbish from the road corridor. This brings the total to 919 bags of rubbish over the last 4 months.
7.	Spot Spraying	FNDC - Work on this funding item now complete
	Noxious Weeds	WDC – Spraying completed during December at Apotu Rd, Crane Rd, Heaton Rd, Hukerenui Rd, Jubilee Rd, Kaiikanui Rd, King St (Hikurangi), Valley Rd, Mangakino Lane, Pigs Head Rd, Vinegar Hill Rd, Whananaki North Rd, Saleyards Rd and Riponui Rd.
		WDC Parks - Work on this funding item now complete
		KDC – No further work completed in December
8.	Sight Rail Improvements	FNDC - The Southern area had carried out sight rail improvement for Otiria Rd, Russell – Whakapara Rd, Haruru Falls Rd and Wakelin Rd.
	(3# districts)	WDC - Minimal work completed on this activity in December
		KDC – Both rails on the Pahi Road Bridge 310_1056 have been renewed to ensure they are fit for purpose.

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9. Kaipara District Council Parks - Vegetation clearance & clean ups - Kai Iwi Lakes & Pou Tu o Te Rangi	 Works are progressing well in the following sites; Mangawhai Community Park: Reinstatement of shared tracks/walkways in progress. Mangawhai Community Park: Follow up pest plant treatment and stump grinding completed in December. Pou Tu o Te Rangi, Pest Plant Removal: Clearance and implementation of pest plant plan and preparation for revegetation significantly completed. Northern Wairoa Memorial Park: Pest plant eradication through bush reserve area completed. Remediation of bush walking track in progress. Kai-iwi Lakes – Taharoa Domain: Area wide removal of pest plants and implementation of pest plant plan. – Focus on target species of Wilding Pines, Acacia, Pampas and Cotoneaster completed ahead of the busy summer visitor season. Omana Road Reserve: Pest Plant Eradication in progress. Mangarahu Rock Reserve: Pest Plant Eradication/Treatment follow up work in progress.
 Whangarei District Council Parks - Vegetation clearance & clean ups 	While the Contractor's (NPC) staff were on their holidays those redeployed workers who hadn't accrued enough leave spread mulch on gardens near the Whangarei Falls end of the track and edge control along the completed track. The crew also spent one day assisting the Trust with Christmas community care packages.
 Far North District Council Parks - Vegetation clearance & clean ups 	 Minimal work completed on this funding item during the month with all of the Te Tai Tokerau Worker Redeployment team integrated into our other areas of the Contractor's business and utilised in other works – this has enabled the Contractor to retain the team through to the extended date of late February. Charges for December relate to supplier and specialist subcontractor charges for mulching with tracked mulcher, supply of bulk mulch and moving of bulk mulch with bobcat
12. Northland Regional Council - Rivers & Beaches Vegetation clearance & clean ups	Funding item complete.
13. Tikipunga cycle trail - Stage 1 - (Totara Parklands to Whangarei Falls)	All redeployment funding works now completed - Installation of base aggregate and top coat, installation of recycled fencing, installation of post a rail fencing and "Pinch" gate, weed eat sides of track, tidy site remove rubbish. Stage 2 is now complete, and we have built 2.6km path with a width of between 2.5-3.0m from Whangarei Falls to Vinegar Hill Road. To fully complete the path we utilise funding from CIP Tikipunga Shared path funds to install the connecting walkway bridge.
14. New Footpaths (3# districts) missing links in	Overall – Delivery remains aligned with planned construction schedules FNDC –

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existing urban network	 Signal Station Road Footpath construction starter out, piles for boardwalk installed and 500m cond Point Rd: construct pavement infill along the new complete the job. WDC – 	crete poured.
	Construction complete at One Tree Point Rd, Tai	uraroa Rd and Gillingham Rd
	Construction is progressing at Ngunguru Rd	
	KDC-	
	Matakohe Shared path construction continued	
15. Accelerated	FNDC - The Wet Roll & Grade (WRG) is progressing with	h following roads completed:
Unsealed network grading	 Southern area: Bayley Rd, Haruru Falls Rd, Oihi F Rd and Waikare Road completed. 	Rd, Purerua Rd, Rangihoua Rd, Rawhiti
program	• Northern area: Wreck Bay Rd, Ramp Rd, Te Pua	Rd and Matai Bay Rd
	Haruru Falls Road	Waikare Road
	WDC – Wet-roll and grading of unravelling sections of Ford Rd.	oray road, campbell ku & Ngunguru
	KDC – No works undertaken during December.	
16. WDC Storm	Storm Response scope accepted by MBIE and activitie	s have continued.
Response works	80% of total \$2m identified works has been completed	d as at 31 December 2020.

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					Monthly Progress				
Work Type		Original Total Revised For		Expendit	ure % Complete	Comments			
Stormwater, Waste & Draina									
(retrospective)		\$ 163,943.90	\$ 163,943.90	\$ 163,94	3.90 100%	Retrospective costs			
Stormwater, Waste & Draina	ś -	\$ 28,384.94	\$ 28.38	100	Trailing costs for ratespactive projects				
(retrospective - additional co Stormwater, Waste & Draina		5 -	\$ 28,384.94	\$ 28,38	4.94 100%	Trailing costs for retrospective projects All works completed @ less than origina			
(work to complete)	-	\$ 405,865.08	\$ 331,137.09	\$ 331,13	7.09 100%	estimates	ress than onginal		
Parks		J 403,003.08	\$ 551,157.05	V 334,13	10070	Additional storm damaged Parks sites			
(retrospective - completed o	r committed)	\$ 490,341.25	\$ 474,801.45	\$ 474,80	1.45 100%	(previously excluded due to insufficie			
Parks (work to complete)		\$ 290,600.00	\$ 301,699.00	\$ 69,60	8.62 23%	budget) utilising cost s	avings / underspend		
Parks (additional identified v	works)	\$ -	\$ 224,680.00	\$ 135,45	3.50 60%	amounts from Stormwa	ater and Roading.		
	(penditure w	rill be manag	\$ 2,072,681.45 ged across fun		0.66 81%				
17. FNDC Storm Response works	Delivery r physically programm provided	isk has beer completed ne works sc within the J	n highlighted t by the progra	hat not a mme con ompletec	ll activities wi npletion date d in January w	hin this funding it of 27th February.	tem may be Assessment of		
	Delivery r physically programm provided Table belo	isk has beer completed ne works sci within the J ow reflects e	n highlighted t by the progra hedule to be c anuary report	hat not a mme con ompletec	ll activities wi npletion date d in January w eember.	thin this funding it of 27th February. ith further detaile Moerewa	tem may be Assessment of ed update to be		
Response works	Delivery r physically programm provided Table belo	isk has beer completed ne works sci within the J ow reflects of ype	n highlighted t by the progra hedule to be c anuary report expenditure to	hat not a mme con ompleted o end Dec	II activities wi npletion date d in January w rember. Total	thin this funding it of 27th February. ith further detaile Moerewa component	tem may be Assessment of ed update to be Completed Value		
	Delivery r physically programm provided Table belo	isk has beer completed ne works sci within the J ow reflects of ype	n highlighted t by the progra hedule to be c anuary report expenditure to	hat not a mme con ompletec	ll activities wi npletion date d in January w eember.	thin this funding it of 27th February. ith further detaile Moerewa	tem may be Assessment of ed update to be Completed Value		
Response works	Delivery r physically programm provided Table belo Work T ean Up (re	isk has beer completed ne works sci within the J ow reflects of ype trospectiv	h highlighted t by the progra hedule to be c anuary report expenditure to ve)	hat not a mme con ompleted o end Dec	II activities wi npletion date d in January w rember. Total	thin this funding it of 27th February. ith further detaile Moerewa component	tem may be Assessment of ed update to be		
Response works	Delivery r physically programm provided Table belo Work T ean Up (re	isk has beer completed ne works sci within the J ow reflects of ype trospectiv	h highlighted t by the progra hedule to be c anuary report expenditure to ve)	hat not a mme con ompleted o end Dec \$ \$ \$	II activities wi npletion date d in January w cember. Total 77,073.06	thin this funding it of 27th February. ith further detaile Moerewa component \$ 77,073.06	Completed Value \$ 77,073.06		
Response works More wa Initial Cle BSL Districtwide F	Delivery r physically programm provided Table belo Work T ean Up (re	isk has beer completed ne works sci within the J ow reflects of ype trospectiv	h highlighted t by the progra hedule to be c anuary report expenditure to ve)	hat not a mme con ompleted o end Dec \$ \$ \$ \$ \$	Il activities wi npletion date d in January w eember. Total 77,073.06 113,779.06	hin this funding it of 27th February. ith further detaile Moerewa component \$ 77,073.06 \$ -	Completed Value \$ 77,073.06 \$ 113,779.06		
Response works More wa Initial Cle BSL Districtwide F Flood Protection	Delivery r physically programm provided Table belo Work T ean Up (re Flood Resp Works	isk has beer completed ne works sci within the J ow reflects of ype trospectiv ionse (ret	h highlighted t by the progra hedule to be c anuary report expenditure to ve)	hat not a mme con ompleted o end Dec \$ \$ \$ \$ \$	Il activities wi npletion date d in January w rember. Total 77,073.06 113,779.06 351,906.78	Moerewa component \$ 77,073.06 \$ - \$ 179,435.00	Completed Value \$ 77,073.06 \$ 113,779.06 \$ 55,317.00		
Response works More wa Initial Cle BSL Districtwide F Flood Protection V Parks	Delivery r physically programm provided Table belo Work T ean Up (re ilood Resp Works wa Specific	isk has beer completed ne works sci within the J ow reflects of ype trospectiv ionse (ret	h highlighted t by the progra hedule to be c anuary report expenditure to ve)	hat not a mme con ompleted o end Dec \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Il activities wi npletion date d in January w rember. Total 77,073.06 113,779.06 351,906.78 550,735.00	Moerewa component \$ 77,073.06 \$ - \$ 179,435.00 \$ 31,435.00	Completed Value \$ 77,073.06 \$ 113,779.06 \$ 55,317.00 \$ 1,435.00		

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2. Redeployment Outcomes

2.1 Please complete the following table for the number of people working to deliver the project in the current reporting period.

Project Element	Total People Working	Previously Unemployed	Youth (15-24)	Mäori	Pasifika	Women	Job type (Part Time/Full Time/ Contractor)
1. Removal of self-seeded roadside trees					а. С	9 	Fulltime
 Roading sightline improvements and vegetation clearance 	11	5	4	3	1	4	Sub-contractor: Arborist360
3. Roadside litter collection and clean-up	I				6		Same resources as item 1
4. Removal of known Road side hazardous trees	38	0	6	17	0	1	Full Time Contractor
5. Removal of self-seeded roadside trees	20	2	7	9	1	1	Full Time Contractor
6. Roadside litter collection and clean-up	13	0	4	5	2	4	Full Time Fixed Term
7. Spot Spraying Noxious Weeds	7	4	1	3	0	1	Combination of Contractor staff & redeployed workers
8. Sight Rail Improvements (3# districts)	19	2	6	10	2	2	
9. Kaipara District Council Parks - Vegetation clearance & clean ups - Kai Iwi Lakes & Pou Tu o Te Rangi	26	14	5	21	0	6	3 x Contractor 12 x Part-time assisting with Project. 11 x Full time duration of Project.
10. Whangarei District Council Parks - Vegetation clearance & clean ups	2	2	0	2	0	0	2 new FTE employed by Te Hau Āwhiowhi o Otangarei Trust
11. Far North District Council Parks - Vegetation clearance & clean ups	3	2	0	2	1	0	Fulltime fixed term
12. Northland Regional Council - Rivers & Beaches Vegetation clearance & clean ups	0	0	0	0	0	0	Funding item now complete
13. Tikipunga cycle trail - Stage 1 - (Totara Parklands to Whangarei Falls)	11	8	4	6	1	1	8 FTE - employed by Te Hau Āwhiowhio o Otangarei Trust 2.5 existing FTE - employed by Northland Park Care
14. New Footpaths (3# districts) missing links in existing urban network	53	9	7	8	0	0	Specialist contractor work supplimented by new employees where possible - Only those engaged during December are liste
15. Accelerated Unsealed network grading program	14	0	4	6	2	3	WRG Activiteis underway in FNDC & WDC Districts
Target	165	50	30%	45%	5%	20%	
Actual current month	217	48	48	92	10	23	
Comparison to employment target of 165	+52	-2	29%	56%	6%	14%	
Peak Employment (October)	293	98	72	126	25	50	
Comparison to employment target of 165	+128	+48	44%	76%	15%	30%	

Note – As activities begin to reach completion the number of staff engaged on the programme are slowly beginning to reduce, noting that the majority of previously unemployed are being retained (either on the funded programme or offers of alternate work) where possible.

2.2 Complete the following total jobs table, showing total current employed, previously employed and expected future jobs in the project.

Current jobs (this should be the same as Total People Working in the table above)	People previously but no longer employed on the project	Expected jobs in the future
217	Unable to provide exact measure with number of commencements and completions across multiple activities	Limited additional jobs for remainder of programme. Intent is to retain employed staff for as long as funding allows (including redeploying across activities)

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2.3 Provide any additional narrative to explain the table or give other relevant information.

Waka Kotahi – project closure comments:

It has been a privilege for *Waka Kotahi NZ Transport Agency* to have provided short-term employment for those local workers displaced by the COVID economic crisis, with three of these workers now in permanent full-time work with our roading maintenance contractor, Fulton Hogan as a result. In addition, by engaging Arborist360 as a subcontractor, we were able to support the development of new, innovative technologies in roadside tree removal for improvements in safety and efficiency in this field. Further, *Arborist360* provided local community groups and residents with mulch and firewood as a result of this work.

The Provincial Growth Fund (PGF) has provided significant positive outcomes to Northland's highway network, with the removal of roadside litter, installation of anti-litter signage and improving sightlines for road-users by trimming or removing roadside trees. By incorporating this work into *Waka Kotahi's* scheduled highway maintenance programme, significant efficiencies to this investment were achieved as extra-ordinary dedicated temporary traffic management was not required for this work to be safely completed.

Waka Kotahi and its contractors are grateful for the opportunity to contribute to this PGF project. The capabilities and resources available to *Waka Kotahi* have allowed the wider team to quickly and cost-effectively contribute to win/win outcomes for Northland in the post-Covid environment. These capabilities are available on an ongoing basis and we would welcome any further opportunities to contribute in this way should the opportunity arise.

Footpaths:

Downers have reported "Through this work we have been able to support the continued workload for our subcontract businesses. The short nature and need for skilled labour have made bringing new staff onboard difficult. Although thanks to the support of this work we are still working to increase the size of our team. We currently have 5 jobs advertised for staff in positions of STMS Level 1, concrete foreman, general labourers, and Class 5 drivers. This project has been used to develop one of our young staff members as she studies for a Diploma of Engineering. Panaia used this work to develop her project management and cost control skills".

KDC Parks:

Throughout December 26 people were employed as part of the current stages of works, of which 2 were contractors. Of the 26 employed in December 13 of these have now completed the works such as pest plant eradication that they were engaged to undertake, and most have been redeployed to works outside of this project. There are further works to be undertaken through January and February to fully complete elements of this works package where it is expected that there will be 13 people employed through the month of January and February to continue with completion of elements of this work package. The works were originally programmed to be completed by December 2020, however due to several of the work elements being within high-profile parks, the works have been reprogrammed in the interest of Health & Safety to avoid the peak Christmas/Summer holiday season. The extension of works into early 2021 has also provided additional work surety for some of the suppliers and workers.

FNDC Roading feedback from Maintenance Contractors):

Feedback from Fulton Hogan: "The sight rail and litter pick up work has provided additional employment – through Allied work force to several people. Beyond these programmes they have been retained as part of our extended construction programme as labourers traffic controllers. They have all shown great work ethics learned some new skills and become part of our wider FH team. With the amount of additional construction work this season we have needed more people resource to achieve our deadlines – having the litter and sight rail work has been great but a struggle to complete in the timeframe given. We have had positive feedback and comments from travelling public and residents with the litter removal work."

Feedback from Ventia: While the extra work has been of value to the network and appreciated by the contractor, in future more prior planning and understanding of health and safety requirements along with management of these resources is required. We found that there were too many unskilled labourers working together in these teams. If the work was spread out over a longer time, then less people could be brought on and trained to gain skills for long term employment. 3 of the sight rail team that were brought in moved on very quickly which is frustrating for contractors with the onboarding process at Ventia.

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Due to the value of the work and the short notice in giving the green light Ventia were unable to bring on any further management of this works stream, a lot of the time the teams were under managed, at time placing additional stress on the supervisors and project managers. Once again with better forward planning needed next time.

3. Supplier Diversity Outcomes

Please complete the following table for the number and value of each direct or sub-contract awarded to local, Māori and/or Pasifika-owned businesses during the current reporting period.

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Name of business	of business Business type (Máori, Pasifika, local) Contract type (direct, sub- contract) (briefly describe)		Length of contract (months)	Total value of contract (\$) (Approx)	No. new employees (as a result of contract)	
iohnson Contractors	Maori	Direct	Employ and supervise work of those directly affected by Covid-19	3.5	\$ 200,000	10
18 Traffic Control Limited	Local	Sub-Contract	Opportunity for local branch to grow and create new jobs. Contribution to contract purpose by providing Traffic Management	5 months	\$ 300,000	6
O'Rouke Contractors	Local	Sub-Contract	Mechanical and chain saw tree felling and mulching	1 month	\$ 137,000	1
Boss Logging	Maori	Sub-Contract	Mechanical and chain saw tree felling and mulching	2 months	\$ 275,000	1
Team Vegetation	Local	Sub-Contract	Gun spraying noxious weeds	2 months	\$ 150,000	1
Tag	Local	Sub-Contract	Noxious weed spraying and seedling control (FNDC & WDC)	5 months	\$ 50,000	2
Northern Tree Works	Local	Sub-Contract	Climbing to remove limbs and tree feiling	2 months	\$ 110,000	0
Traffic Management Services	Maori (Waikato Head Office / Northland staff)	Sub-Contract	Traffic Control for Northland Tree Works	2	Included in NTW amount	0
Top Energy	Local	Sub-Contract	Removing seedlings and tree felling	2 months	\$ 152,000	0
Allied Work Force (AWF)	Local	Sub-Contract	Labour hire for various activities	2 months	\$ 219,500	10+
North End Contractors	Local	Sub-Contract	Tree removal	5 months	\$ 350,000	3
Blackwell Contractors	Local	Sub-Contract	Sight-rail modifications	1 month	\$ 50,000	2
Fraffix Manpower	Local	Sub-Contract	Sight-rail modifications	2 months	\$ 30,000	3
18 Tree Services	Local	Di rect contract	Traffic Management & Tree Work	3 months	\$ 232,000	3
Hauraki & Sons	Maori / Local	Sub-Contract	Full scope delivery – pathworks	2 months	\$ 150,000	5
Challenger Specialist Mowing	Local	Sub-Contract	Vegetation Removal – Self-seeded.	2 months	\$ 20,000	0
Te Hau Awhiowhio O Otangarei Trust	Maori Entity	Direct	Parks - Vegetation clearance & clean ups and Tikipunga cycleway	6 months	\$ 296,349	10
Northland Park Care (NPC)	Local	Direct	Cycleway construction & staff supervision	4 months	твс	0
Drang Otang Tree Trimmers / Kia Tupato	Local supported by Maori owned Traffic Management Company	Direct	Removal of pest plants within Kalpara		\$ 367,945	8
Turf Tamer	Local	Direct	Removal of pest plants within Kalpara Parks	5 months	\$ 204,900	0
Te Roroa Group	Maori/Local Iwi owned business	Direct	Removal of pest plants within Kalpara Parks	5 months	\$ 350,000	11 (2 resigned)
Nga Uri o Hau Settlement Trust	Maori/Local Iwi owned business	Direct	Supply and planting of plants for	2 month + follow up	\$ 104,007	4
Andrew Younger	Local	Direct	revegetation Preparation of area for removal of pest plants	1 month	\$ 44,108	0
Contracting Downer NZ / TEAM Vegetation	Local based (Downer) Local (TEAM Vegetation)	Direct (Downer) Subcontract (TEAM Veg)	Removal of pest plants within Kalpara Parks & WDC Roading	5 months	\$ 263,971	2
Waterway Specialists	Local – Mangawhai based	Direct	Removal of pest plants within Kalpara Parks 5 months \$		\$ 139,000	5
Babylon Coast Gardens	Local	Direct	Supply and planting of plants for revegetation	1 month	\$ 18,950	0
Asset Construction Ltd	Local – Mangawhai based	Direct	Reinstatement works with Parks		\$ 260,000	3 (Part-time)
Concrete Specialists	Local	Sub-Contract	FNDC Footpath works	2 weeks	\$ 30,000	2
Robotech	Local	Sub-Contract	FNDC Footpath works (mulching, clearing & disposing of green waste)	3 days	\$ 4,000	
Stonecraft	Local	Sub-Contract	FNDC Footpath works	1 month	\$ 162,800	0
Whangarei Paving	Maori Owned	Sub-Contract	WDC Footpath works	7 days	\$ 13,000	0
Mali Mali	Pasifika business	Sub-Contract	WDC Footpath works	1 month	\$ 15,000	0
Northend Contractors	Local	Sub-Contract	WDC Footpath works	1 month	\$ 30,000	0
Webb Contracting and			FNDC Footpath works (culvert			
Drainage	Local	Sub-Contract	installation)	1 week	\$ 7,000	1
					\$ 4,536,530	53

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4. Social Procurement Objectives

Please provide details of achievements to date against your agreed social procurement objectives.

State your Social Procurement Objectives (as agreed within two weeks of contracting)	Show achievements to date against each of the Social Procurement Objectives	Provide additional narrative to show how tendering, procurement, employment and/or training arrangements are helping to achieve the Social Procurement Objectives, identifying any limitations or further support needed.
Targeted employment:	Refer to employment table – section 2.1	NZTA/Fulton Hogan
Employment targets that apply to the 165 workers employed: a. 45% Maori b. 5% Pasifika		Opportunity given to previously unemployed locals to re enter the work force. Three of these staff have now accepted full time roles with Fulton Hogan – one of them has trained to be a roading inspector. Two are currently
c. 20% Women		working under casual contracts. FNDC Roading:
d. 30% Youth (18–24 years)		Staff retained are gaining experience and training leading to more job security and opportunity for continued employment.
Note – while the above add to 100%, employed workers may cover multiple categories and therefore not all		KDC Roading:
engaged workers will come from these target groups. Of the 165 workers employed, at least 50 are to be 'new' (fixed term) roles for people displaced due to Covid-19 and still unemployed.		 The women employed from AWF for the litter crew have proved their abilities, attitudes and willingness to work. As a result, Ventia have indicated that at the conclusion of this project they are intending to employ them as Traffic Controllers for their summer rehab and renewals programme.
		 3 additional jobs have been created in the Tree felling crews.
		 Harding Consultancy Ltd (2x female Maori contractors) have provided social procurement support, visiting/monitoring on site works.
		KDC Parks:
		 The achievement of employment targets are as follows;
		a) Over 70% Maori (*80% for the current month)
		b) 0% Pasifika
		c) Over 20% Woman (23% for current month)
		d) 34% Youth (*20% for current month)
		 23 x workers have been employed who were previously unemployed, 14 of these are still currently employed as part of the project.
Local (regional) businesses prioritised for employment:	Refer to Section 3 of report	KDC Parks:
40% of direct contract and sub-contract values will be awarded to businesses owned and operated by people		 Of the total value of contracts awarded to date, 95% awarded to Locally owned enterprises.
who reside in the region		 The willingness and availability of local businesses has aided in achieving almost double the targeted value in the works contracted to date.
Maori and Pasifika enterprises prioritised for	Refer to Section 3 of report	KDC Parks:
employment: 15% of the direct contract and sub-contract values will be awarded to Maori or Pasifika enterprises.		 Of the total value of contracts awarded to date, the value portion awarded Maori owned enterprises is over 33%.
		 Early involvement of Te Roroa Group (TRG) and Nga Uri o Hau Settlement Trust Nurseries has provided the ability to exceed the target to date.
		 TRG have also engaged 12 people who were previously unemployed as part of their project works, with 9 currently still engaged full time within the project works.

Skills and training delivered: Provide training relevant to the requirements pre/post and throughout the project to ensure all staff are appropriately skilled, qualified, and safe in the workplace.	FNDC Roading: New employees going though competency qualification. We have four who have increased competency in tree harvesting having started as labourers at the start of the tree felling programme.	These young men were engaged by the company involved in hazardous tree removal as labourers and have been trained and retained. If forestry remains as a viable industry in the North, then these men will be assured of employment. Team Vegetation and TaG Vegetation have both engaged staff earlier than intended and will be providing on-going training in relevant skills and sponsoring them through the industry standard Growsafe training course. This will

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State your Social Procurement Objectives (as agreed within two weeks of contracting)	Show achievements to date against each of the Social Procurement Objectives	Provide additional narrative to show how tendering, procurement, employment and/or training arrangements are helping to achieve the Social Procurement Objectives, identifying any limitations or further support needed.			
		continue their employment for at least the summer season.			
Improved Conditions for Workers:					
All new employees will undergo pre-employment induction, by the Employer, in accordance with Approved Codes of Practice for Health and Safety for the relevant industry standards.	All workers have completed respective organisation induction and on-boarding training. Several opportunities being pursued for engaged redeployed workers to transition to full time				
Employers will provide a documented Health and Safety Management System that is effective and meets the requirements of the Health and Safety at Work Act 2015 and the associated Regulations and Codes of Practice.	employment.				
All new employees engaged on fixed term contracts shall receive renumeration consistent with industry standards for their skill level and experience.					
Environmental Responsibility:	KDC Roading:				
 Adoption of practices that enable the project to be delivered sustainably, include: protecting or enhancing the local ecosystem and its indigenous biodiversity. This tree removal project is focussed on removing pest species trees including wilding Conifers, invasive Poplars and Willows Actively seeking to minimise the carbon impact of project delivery, to support the transition to a net 	 Harding Consultancy supports T8 to provide competent provider to cut up stockpiled wood for distribution KDC Parks: The works being undertaken by Orang Otang Tree Trimmers, includes mulching of tree waste for reuse as ground cover, recovering of gum stems for use as landscape edging, and possible recovery as firewood 	 Arrangements in place with contractors have been focused on working collaboratively with community and other groups in order to reuse by-products where possible. Open communication channels between contractor, 			
 Project derivery, to support the transition to a net zero emissions economy whenever practical. Minimising waste, re-using materials, and where possible incorporating the principles of the circular economy. Where possible tree debris will be chipped into mulch and felled trees (of appropriate size) will be made available to community groups for distribution. Build resilience back into areas of work following the 	 for community groups. The works undertaken by Turf Tamer involves a process of mechanically mulching in-situ which provides an initial ground cover prior to further treatment/revegetation. WDC Parks: 80% of the new fence has been re-constructed from 	KDC, and other stakeholder groups have been utilised to seek opportunities for re-use of by- products and recycling where possible.			
removal of the pest trees, (where practical) native trees will be replanted.	re-cycling the existing fence, reducing waste to landfill.				

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5. Financials

Six milestone payment claims totaling \$11,930,500.26 have been claimed of MBIE to date:

Project Element		ding Received to date	actual Project anditure to Date	Notes
1. Removal of self seeded roadside trees	\$	300,000.00		
2. Roading sightline improvements and vegetation clearance	\$	460,000.00	\$ 1,260,000.00	Works completed
3. Roadside litter collection and clean-up	\$	500,000.00		
 Removal of known Road side hazardous trees 	\$	1,665,000.09	\$ 1,623,945.00	
5. Removal of self-seeded roadside trees	\$	804,750.04	\$ 570,184.00	
 Roadside litter collection and clean-up 	\$	434,750.02	\$ 441,588.00	
7. Spot Spraying Noxious Weeds	\$	231,250.01	\$ 285,297.00	-
8. Sight Rail Improvements (3# districts)	\$	185,000.01	\$ 117,346.00	
9. Kaipara District Council Parks - Vegetation clearance & clean ups - Kai Iwi Lakes & Pou Tu o Te Rangi	\$	1,480,000.00	\$ 1,320,085.00	
10. Whangarei District Council Parks - Vegetation clearance & clean ups	\$	185,000.01		
13. Tikipunga cycle trail - Stage 1 (Totara Parklands to Whangarei Falls)	\$	370,000.02	\$ 600,000.00	Works completed
11.Far North District Council Parks - Vegetation clearance & clean ups	\$	185,000.01	\$ 157,502.40	
12.Northland Regional Council - Rivers & Beaches Vegetation clearance & clean ups	\$	200,000.00	\$ 200,000.00	Works completed
14.New Footpaths (3# districts) missing links in existing urban network	\$	1,387,500.07	\$ 1,127,921.00	
15.Accelerated Unsealed network grading program	\$	342,250.02	\$ 156,192.00	
16.WDC Flood Damage repairs	\$	1,600,000.00	\$ 1,621,370.00	
17.FNDC Flood Damage repairs	\$	1,600,000.00	\$ 379,740.00	
Total	\$	11,930,500.30	\$ 9,861,170.40	

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6. Forward Work Programme

Outline forward work to be completed in the next month (not required in the Final Report)

Project Element	Outline of Planned Work (for next month)
 Removal of self- seeded roadside trees 	Funding Item now completed.
2. Roading sightline improvements and vegetation clearance	Funding Item now completed.
3. Roadside litter collection and clean-up	Funding Item now completed.
4. Removal of known Road side hazardous trees	 FNDC – Completed. WDC – Work programmed for completion at Russell Rd and Whananaki North Rd Crows Nest Rd. KDC – Waihue Rd – Final Spray and tidy up mow.
5. Removal of self- seeded roadside trees	 FNDC - Continue with works around the District removing identified self-seeded Pines, Wattles. Additional self -sown trees are programmed and will be completed if budget permits. WDC - Key work is planned on Maungakaramea Road this next month, also a continuation of Mangapai and Paparoa Road. KDC - Waihue Rd - Final Spray and tidy up mow.
6. Roadside litter collection and clean-up	 FNDC – Completed. WDC – Finish off the tidy-up of Riverside Drive. KDC – Roads targeted for the next month are Cove Rd, Kaiwaka Mangawhai Rd (continuing), Mangawhai Rd (continuing) and Tomarata Rd
7. Spot Spraying Noxious Weeds	 FNDC – Works completed on this funding item KDC – Works completed on this funding item WDC (Roading) – Work remaining to be completed at Mangakino Lane, Vinegar Hill Road, Saleyards Road and Riponui Road. WDC (Parks Component) - Works completed on this funding item
8. Sight Rail Improvements (3# districts)	 FNDC – Haruru Fall Rd and Te Karauwha Parade to complete in the south and the North to complete Matauri Bay Rd, Wainui-Matauri Rd and Wainui Rds to continue as budget allows. WDC – Complete remaining works at Owhiwa Rd. (3 sites), Patau Sth Rd. (2 sites) KDC – Works completed on this funding item
9. Kaipara District Council Parks - Vegetation clearance & clean ups - Kai Iwi Lakes & Pou Tu o Te Rangi	 Mangawhai Community Park, reinstatement, selected planting & revegetation, groundwork preparation for shared pathway. Pou Tu o Te Rangi, Implementation of pest plant plan continuing, follow up pest plant eradication. Northern Wairoa Memorial Park, Bush walkway remediation works.

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Project Element	Outline of Planned Work (for next month)
	 Kaiwaka Parks & Reserve Area, pest plant removal. – Works were planned to be completed in early December, however resource was focussed on completing works at Kai-iwi Lakes prior to the busy Christmas season.
10. Whangarei District Council Parks - Vegetation clearance & clean ups	Funding Item now completed.
11. Far North District Council Parks - Vegetation clearance & clean ups	 Still to complete: Mulching projects in Kerikeri Noxious weed removal projects in Kaitaia area & noxious weed growth in coastal areas targeting weeds Follow up work in all areas to spray any new growth
12. Northland Regional Council - Rivers & Beaches Vegetation clearance & clean ups	Funding Item now completed.
13.13. Tikipunga cycle trail - Stage 1 - (Totara Parklands to Whangarei Falls)	Funding Item now completed.
14. New Footpaths (3# districts) missing links in existing urban network	 FNDC – Continue with footpath construction on Signal Station Road Complete all construction works at Taipa Point Road, Foreshore Road & Mamaru Road. WDC – Complete all minor works at Tauraroa Rd and Gillingham Rd Complete remaining key construction works at Ngunguru Rd KDC – Complete remaining Matakohe path construction work
15. Accelerated Unsealed network grading program	 FNDC - Roads and RPs confirmed. Roads have been identified and planned for the end of January and February (in addition to the 10 x roads completed in December). WDC - Reactive Wet-roll and grading of unravelling sections of unsealed roads. KDC - Roads and RPs confirmed.
16. WDC Storm Response	Continuation of works identified in scope document provided to MBIE. In the New Year some of the storm repair work that needed a heli-drop of materials along the Hatea River and Frank Holman track will be completed with the assistance of the Te Hau Awhiowhio O Otangarei Trust crew and management from NPC. Savings will be seen in the July storm damage funding.
17.FNDC Storm Response	Commencement of works identified in scope document provided to MBIE.

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	7. Risks/Issues/Opportunities (Any risks and/or issues arising or expected to arise, costs and mitigation)											
Funding Item(s)	Risks / Issues	Magnitude / Likelihood	Mitigation									
All	Failure to complete works within originally Contracted timeframes	Severe / High	Risk now mitigated with MBIE approval of Contract Variation to extend Completion timeframe to new Completion date of 28/02/2021.									
17	Delivery risk has been highlighted that not all activities within this funding item (FNDC Storm Repairs) may be physically completed by the programme completion date of 27th February.	High / High	Assessment of programme works schedule to be completed in January with further detailed update to be provided within the January report. Assessment of programme works schedule to be completed in January with further detailed update to be provided within the January report.									
All	Changes to Covid-19 Alert Levels	Severe / Moderate	Work programmes to be adapted to suit restrictions where possible. Contractor risk control plans in place									
All	PCBU H&S Compliance and responsibilities	Significant / Unlikely	Engagement of new resources through existing contract mechanisms. Utilise contractors existing induction and HSQE policies and procedures									
All roading re& vegetation related work	Unskilled or inexperienced labour working on roadside.	High/Low	Qualified supervision, appropriate traffic management plans and support, Traffic safety devices, beacons, safety vests. Engagement of specialist/qualified forestry/arborist resources supported by appropriate traffic management teams.									

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8. Communications

KDC

Social media updates – Facebook updates have been posted as the work has progressed particularly the Mangawhai Park works (prior to work commencing, as well as during the work). More updates will follow as the work continues. Regular updates are provided on the Kaipara District Council website under latest news. Specific media communications regarding the works at Mangawhai and Kai-iwi Lakes continue to be featured in the Kaipara Lifestyler and Mangawhai Focus.

FNDC Noxious Weed Spraying

As noted earlier in this report, Contact has been made with media and concerned residents once some native Pohutakawa were showing signs of spray in the southern area. (Not such positive contact). The trees were part of a community planting project, without council approval in relation to future sight line and road safety issues. However, they were very prominent and considered an asset to the driving experience and enhancement to the environment.

Some other locations have been identified with the same issue and are currently being investigated by FNDC staff, the Principal Contractor and the sub-contracted spray company.

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Additional information - Redeployment Activity photos

Missing Link Footpath works

KDC - Matakohe Shared Path





Before



After

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FNDC 20/21 CAPTIAL AND RENEWAL PROGRAMME UPDATED



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DECEMBER UPDATE

Category	Sub-activity	Location	% Complete	Monthly Update	Next month planned activities	Risk	Risk Comments
125 - Footpath Maintenance	Footpath Renewal	Te Hiku Ward: Refer RAMM for list of sites.	43%	Construction	Commence/Continue construction	3	
125 - Footpath Maintenance	Footpath Renewal	BOI-Whangaroa Ward: Refer RAMM for list of sites.	54%	Construction progressing	Continue work in Moerewa	3	Diverting crew to Redeployment works currently delays the overall (District) renewal programme by 1 month for completion in April.
125 - Footpath Maintenance	Footpath Renewal	Kaikohe-Hokianga Ward: Refer RAMM for list of sites.	22%	Horeke Footpath Renewal complete. Recommence remainder of programme Feb 2021.	No more renewals programmed until Feb 2021	3	Diverting crew to Redeployment works currently delays the overall (District) renewal programme but will still complete in 20/21
140 - Minor Events	General Maintenance	lwitaua Road RP 14005	100%	Construction complete	n/a	3	
140 - Minor Events	General Maintenance	Kohomaru Rd Mitigation Works - (Balance of Carry-over from 2019/20)	#DIV/0!	Construction complete	n/a	3	
140 - Minor Events	General Maintenance	Paponga Rd RP8886 Slip Remediation	96%	Construction complete	n/a	3	
140 - Minor Events	General Maintenance	Rawhiti Rd	#DIV/0!	Construction complete	n/a	3	
140 - Minor Events	General Maintenance	Waikare Road - various locations	0%	Work scheduled to start in Feb 2021	Work scheduled to start in Feb 2021	3	Construction start deferred to Feb due to contractor attending to reactive storm event works.
141 - Emergency Works	Resilience	Diggers Valley Rd	76%	Construction Complete	Defects period	3	
141 - Emergency Works	Resilience	Fairburn Rd	77%	Construction Complete	Defects period	3	
141 - Emergency Works	Resilience	West Coast Rd RP 9563	129%	Construction Complete	Defects period	3	
141 - Emergency Works	Resilience	Wharekawa Rd RP 3552	89%	Construction Complete	Defects period monitoring will end July/August 2021	3	
141 - Emergency Works	Resilience	2018 EW surplus	#DIV/0!	2018 Emergency Works programme is complete.	n/a	3	Budget has been made surplus and concludes the 2018 EW programme
141 - Emergency Works	Resilience	PLACEHOLDER	0%	Budget is surplus to requirements	Formally surplus budget from programme.	1	Budget to be formally surplused and subsidy returned to NZTA.
212 - Sealed Road Resurfacing	Sealing Chip seal	North region (CS - 31.4km, TAC - 0.632km)	52%	Sealing works in progress	Sealing works in progress	3	
212 - Sealed Road Resurfacing	Sealing Chip seal	South Region (CS -37.99km)	50%	Sealing works in progress	Sealing works in progress	3	
213 - Drainage Renewals	Rehabs	programmed rehab sites	0%	Review and approval of designs	renewal of drainage asset.	3	
214 - Sealed Road pavement rehabilitation	Rehabs	Rehab design and investigation	0%	working on a tender for investigation and testing	working on a tender for investigation and testing	3	
214 - Sealed Road pavement rehabilitation	Rehabs	Broadwood road	110%	Rehab Completed	Final walkover and maintenance in the list week of 18th of January 2021	3	
214 - Sealed Road pavement rehabilitation	Rehabs	Horeke Road	5%	Enabling works well completed with dearance for width/drainage completed.	Pavement works will commence in January once Pavement Design has been agreed and approved.	3	
214 - Sealed Road pavement rehabilitation	Rehabs	OKAIHAU ROAD	98%	Site sealed and line-marked in December.	Sealing of driveways and widenings to be completed. Practical completion and snag walk-over to be completed by NTA in early January.	3	
214 - Sealed Road pavement rehabilitation	Rehabs	PAWARENGA ROAD	41%	site 1/ drainage and enabling works complete, including several shoulder support rock walls. Shoulder undercuts and tie-in dig-outs are complete. Site2/3 ditto, shoulder undercuts and tie- ins complete from RP5045 - 5820.	Site 1, kerb and channel replacement commencing January, pavement construction to commence January. Site 2/3, Awaiting decision on pavement design and possible completion of reduced site length.	3	
214 - Sealed Road pavement rehabilitation	Rehabs	Pungaere Road	103%	Physical works complete. January final walkover	final walkover	3	

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Category	Sub-activity	Location	% Complete	Monthly Update	Next month planned activities	Risk	Risk Comments
214 - Sealed Road pavement rehabilitation	Rehabs	Purerua Road	105%	Physical works complete, practical completion and snag list complete	final walkover	3	
214 - Sealed Road pavement rehabilitation	Rehabs	Contract management fixed cost.	50%	fixed cost	fixed cost	3	
214 - Sealed Road pavement rehabilitation	Rehabs	WAIMATENUI / MATARAUA ROAD	8%	tender evaluation complete. Supplier recommendation report being urgently completed. Acceptance of successful tenderer.	Contract Award	3	possible end of season time constraints, tenderer/contractor availability. Timeline needs to be managed carefully. Procurement needs FNDC approval at CE level, approval templates in preparation for signing.
215 - Structures Component Replacement	Bridge	Churtons Road Bridge C13	0%	Investigation and design in progress	Continue with Investigation and design	3	
215 - Structures Component Replacement	Bridge	Hihi Road Bridge F07	0%	Investigation and design in progress	Continue with Investigation and design	3	
215 - Structures Component Replacement	Bridge	Matawherohia Road & Puhata road	0%	Matawherohia removed from project and added to Heavy bridge renewal works	Continue with Puhata designs	3	
215 - Structures Component Replacement	Bridge	Contingency for any overruns and testing, designing for next FY	0%			3	
215 - Structures Component Replacement	Bridge	General Bridge maintenance	0%	Tendering in process	Award contract/finalising deliverables	3	
215 - Structures Component Replacement	Bridge	Grove Road Bridge M28	48%	Options report	Detailed design & documentation	3	
215 - Structures Component Replacement	Bridge	Heavy Bridge Maintenance (Nth & Sth)	114%	Achieved practical completion on 12 November for South. Scope for North 19/20 contract has been added to this year's General Bridge Contract 20/21.	Defects liability period for South.	3	
215 - Structures Component Replacement	Bridge	Kaitaia Awaroa road bridge D42	16%	Site investigation and options report in Jan. 2021	Site investigation and options report in Jan. 2021	3	
215 - Structures Component Replacement	Bridge	Kaitaia Awaroa road bridge D47	16%	Site investigation and options report in Jan. 2021	Site investigation and options report in Jan. 2021	3	
215 - Structures Component Replacement	Bridge	Kenana Road Culvert E94	0%	Site investigation and options report done and will be package with Grove Road Bridge M28	Site investigation and options report done and will be package with Grove Road Bridge M28	3	
215 - Structures Component Replacement	Bridge	Mangamuka Road Culvert H40	0%	Defects liability period	Defects liability period	3	
215 - Structures Component Replacement	Bridge	Matai Bay Road Bridge C03	8%	Site investigation and options report in Dec. 2020 - Jan. 2021	Site investigation and options report in Dec. 2020 - Jan. 2021	3	
215 - Structures Component Replacement	Bridge	Scour protection (North and South)	154%	Defects liability period for North. Achieved practical completion on 12 November for South.	Defects liability period	3	
215 - Structures Component Replacement	Bridge	Scour protection across the network	4%	tender evaluation complete. Supplier recommendation report being urgently completed. Acceptance of successful tenderer.	Award contract/finalising deliverables	3	
324 - Road Improvements	Lighting	District wide	97%	Complete	Complete	3	
341 - Low Cost Low Risk	Assoc Improvements	Northern & Southern Area: Associated improvements on 2020/21 pavement rehabilitation sites	70%	planning and agreeing on scope	Works in Progress	3	

		rehabilitation sites					
341 - Low Cost Low Risk	Bridge	Puhata Road Bridge D50 Replacement	0%	Investigation and design in progress	Continue with Investigation and design	3	
341 - Low Cost Low Risk	Bridge	Quarry Road (Awanui) Culvert B13 Replacement	0%	Investigation and design in progress	Continue with Investigation and design	3	
341 - Low Cost Low Risk	Bridge	WekaWeka Road Culvert J18 Replacement	0%	Investigation and design in progress	Continue with Investigation and design	3	

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Category	Sub-activity	Location	% Complete	Monthly Update	Next month planned activities	Risk	Risk Comments
341 - Low Cost Low Risk	Bridge	Kaitaia-Awaroa Road Culvert D41 Replacement	24%	Site investigation and options report	Site investigation and options report/Detailed design & documentation	3	
341 - Low Cost Low Risk	Bridge	Otaua Road M28 N28	80%	Works completed and bridge open to general public	Finalise claims and defects walkover	3	
341 - Low Cost Low Risk	Bridge	West Coast Road G01	29%	contractor started with pre fabrication of bridge components	continue with pre fabrication of bridge components off site	3	
341 - Low Cost Low Risk	Lighting	Various District Roads	1%	N/A - awaiting contractor to advise construction start date	N/A - awaiting contractor to advise construction start date	3	
341 - Low Cost Low Risk	New Footpath	Te Hiku Ward: Foreshore Rd - Tasman Heights to Toilets	0%	Construction Contract Pre Award phase	Commence construction	2	Tender price significantly higher than original budge Award pending council approval to reduce scope an increase budget.
341 - Low Cost Low Risk	New Footpath	Te Hiku Ward: Foreshore Road - Toilets to Panorama Ln	0%	Construction Contract Pre Award phase	Commence construction	2	Tender price significantly higher than original budge Award pending council approval to reduce scope an increase budget.
341 - Low Cost Low Risk	New Footpath	Te Hiku Ward: Kaitaia - Dominion Road	0%	Construction Contract Pre Award phase	Commence construction	2	Tender price significantly higher than original budge Award pending council approval to reduce scope an increase budget.
341 - Low Cost Low Risk	New Footpath	Te Hiku Ward: Kaitaia - SH1 Matthews Avenue	0%	Construction Contract Pre Award phase	Commence construction	2	Tender price significantly higher than original budge Award pending council approval to reduce scope an increase budget.
341 - Low Cost Low Risk	New Footpath	Te Hiku Ward: Mill Bay Rd Rangikapiti Rd to Richmond Rd link	25%	Re-scoping due to high tender price	Re-scoping, Engineer's Estimate	2	Tender price significantly higher than original budge May defer to following year pending council approv
341 - Low Cost Low Risk	New Footpath	Te Hiku Ward: Mill Bay Rd to Rangikapiti Rd	15%	Re-scoping due to high tender price	Re-scoping, Engineer's Estimate	2	Tender price significantly higher than original budge May defer to following year pending council approv
341 - Low Cost Low Risk	New Footpath	Te Hiku Ward: SH1 Harbour View Rd to private access	16%	Construction Contract Pre Award phase	Commence construction	2	Tender price significantly higher than original budge Award pending council approval to reduce scope an increase budget.
341 - Low Cost Low Risk	New Footpath	BOI-Whangaroa Ward: Length of Pa Road	8%	Construction Contract Pre Award phase	Commence construction	3	2-3 month design phase delay predominantly due to additional sites added and prioritised for MBIE Redeployment works. Will still deliver this year.
341 - Low Cost Low Risk	New Footpath	BOI-Whangaroa Ward: Ped Bridge near Main St Bridge	0%	Review alternative options to reduce costs associated with bridge but none feasible. Engaged Haigh Workman to proceed with OOS for Design of Peds Bridge including Geotech report.	Review design.	2	Cost likely to exceed budget and construction may deferred due to extensive geotechnical and structur bridge investigations and co-ordination/consultatio to work on a state highway during design stage.
341 - Low Cost Low Risk	New Footpath	BOI-Whangaroa Ward: SH11 Kaipatiki Rd to York Rd	20%	Reviewed and accepted final concept design. Forwarded to NZTA for review, acceptance and safety audit.	After NZTA - possibly engage WSP to proceed with concept design and approve for final construction design.	2	Cost likely to exceed budget and construction may be deferred due to scope change (design around Underslip) and NZTA approval required to reallocate state highway road space.
341 - Low Cost Low Risk	New Footpath	BOI-Whangaroa Ward: Te Taipui Rd to Matauri Bay School Link	18%	Construction Contract Pre Award phase	Commence construction	3	2-3 month design phase delay predominantly due to additional sites added and prioritised for MBIE Redeployment works. Will still deliver this year.
341 - Low Cost Low Risk	New Footpath	Kaikohe-Hokianga Ward: Horeke Rd to Cemetery 294- 330	4%	Construction Contract Pre Award phase	Commence construction	3	2-3 month design phase delay predominantly due to additional sites added and prioritised for MBIE Redeployment works. Will still deliver this year.
341 - Low Cost Low Risk	New Footpath	Kaikohe-Hokianga Ward: Kaikohe Footpath - Taheke Road to Orrs Road eastbound	16%	Construction Contract Pre Award phase	Commence construction	3	2-3 month design phase delay predominantly due to additional sites added and prioritised for MBIE Redeployment works. Will still deliver this year.
341 - Low Cost Low Risk	New Footpath	Kaikohe-Hokianga Ward: Kohukohu Road Manning to Marriner	9%	Construction Contract Pre Award phase	Commence construction	3	2-3 month design phase delay predominantly due to additional sites added and prioritised for MBIE Redeployment works. Will still deliver this year.
341 - Low Cost Low Risk	New Footpath	Kaikohe-Hokianga Ward: Lake Road 91 to 95	0%	Construction Contract Pre Award phase	Commence construction	3	2-3 month design phase delay predominantly due t additional sites added and prioritised for MBIE Redeployment works. Will still deliver this year.
341 - Low Cost Low Risk	New Footpath	Kaikohe-Hokianga Ward: Opononi Footpath - Waianga Place	0%	Construction Contract Pre Award phase	Commence construction	3	2-3 month design phase delay predominantly due t additional sites added and prioritised for MBIE Redeployment works. Will still deliver this year.
341 - Low Cost	New Footpath	Kaikohe-Hokianga Ward:	7%	Construction Contract Pre	Commence construction	3	2-3 month design phase delay predominantly due t

341 - Low Cost Low Risk	New Footpath	Kaikohe-Hokianga Ward: Taumataiwi St Opononi	7%	Construction Contract Pre Award phase	Commence construction	3	additional sites added and prioritised for MBIE Redeployment works. Will still deliver this year.
341 - Low Cost Low Risk	New Footpath	North Park Drive - Whangatane Drive, Kaitaia	100%	Construction completed.	Defects period monitoring will end Aug/ Sep 2021	3	
341 - Low Cost Low Risk	Resilience	Kaitaia Awaroa 26991 (c/o from 19/20 currently in construction)	61%	Construction largely complete but identified horizontal drains defect to be resolved.	Complete	3	
341 - Low Cost Low Risk	Resilience	Mangamuka Road RP 7845 & 8387	3%	Physical works held up due to lead time delays.	Commence Construction early 2021	3	

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Category	Sub-activity	Location	% Complete	Monthly Update	Next month planned activities	Risk	Risk Comments
341 - Low Cost Low Risk	Resilience	Taupo Bay Road RP 8816 & 9169	97%	Complete	Complete	3	
341 - Low Cost Low Risk	Resilience	Wainui Road RP 7200	124%	Complete	Complete	3	
341 - Low Cost Low Risk	Resilience	West Coast Rd RP16005	100%	Complete	Complete	3	
341 - Low Cost Low Risk	Resilience	Long Beach Road RP 294	88%	Construction completed.	Issue Practical Completion certificate.	3	Significant cost savings redistributed to other projects.
341 - Low Cost Low Risk	Resilience	Panguru Road	102%	Continued with pavement stabilisation works and sealed section A and B. Continued discussion concerning additional scope for section C to increase embankment height (funded through NRC).	2 Driveway culverts to be upgraded and driveways sealed. Continue discussion/ agreement for additional scope for section C to increase embankment height (funded through NRC).	3	Significant cost savings redistributed to other projects. Additional scope for section C to be added to programme as separate project if NRC/FNDC agreement concluded in time to deliver and pending confirmation can be delivered within specified timeframe.
341 - Low Cost Low Risk	Resilience	Sullivans Road	93%	Works started on the wall and progressed well with pole installation.	Construction to continue.	3	
341 - Low Cost Low Risk	Resilience	Waikare Road - mitigation contract	79%	Construction completed on original scope. More sites confirmed and work to commence in March 2021.	Construction Monitoring and Issue Practical Completion certificate in March 2021.	3	
341 - Low Cost Low Risk	Resilience	Wharekawa Rd RP 3633	92%	Construction completed.	Issue Practical Completion certificate.	3	
341 - Low Cost Low Risk	Resilience	PLACEHOLDER	#DIV/0!	Budget surplus redistributed	n/a	3	Budget surplus redistributed.
341 - Low Cost Low Risk	Resilience	Aucks Road RP2016	3%	Finalising design outputs ready for acceptance and safety audit.	Commission Safety Audit, Peer Review, Tendering Process	2	Construction project brought forward from 21/22. Tender pending satisfactory conclusion of geotechnical peer review.
341 - Low Cost Low Risk	Resilience	Beach Road RO400	8%	Finalising design outputs ready for acceptance and safety audit.	Commission Safety Audit, Peer Review, Tendering Process	2	Construction project brought forward from 21/22. Tender pending satisfactory conclusion of geotechnical peer review.
341 - Low Cost Low Risk	Resilience	Powell Road RP209	7%	Finalising design outputs ready for acceptance and safety audit.	Commission Safety Audit, Peer Review, Tendering Process	2	Construction project brought forward from 21/22. Tender pending satisfactory conclusion of geotechnical peer review.
341 - Low Cost Low Risk	Resilience	Powell Road RP92-169	5%	Finalising preliminary site investigation	Commission further survey, investigation and temporary pavement repairs	2	Impacted: delay while validating design and negotiating with contractor.
341 - Low Cost Low Risk	Safety	Kaitaia-Awaroa Rd RP3200	100%	Construction completed.	Defects period will end November 2021	3	
341 - Low Cost Low Risk	Safety	Kaitaia-Awaroa Rd RP5690	100%	Construction completed.	Defects period will end November 2021	3	
341 - Low Cost Low Risk	Safety	Long Beach Road improvement	100%	Complete	Complete	3	
341 - Low Cost Low Risk	Safety	Panorama Ln Improvements	100%	Design input complete	No further work/input required.	3	
341 - Low Cost Low Risk	Safety	Route 1 Kaitaia-Ahipara (Kaitaia Awaroa Rd)	86%	Reinspected sealed sections prior to line marking. Final measure-up and issue completion certificate. Project Complete.	Defects period will end November 2021	3	
341 - Low Cost Low Risk	Safety	Route 2 Puketona Junc- Ohaewai (Te AhuAhu & Old Bay Roads)	74%	Construction completed.	Do PACE score	3	
341 - Low Cost Low Risk	Safety	Route 4 Kerikeri-Okaihau (Wiroa Rd, Waiare Rd, Wehirua Rd & Kerikeri Rd)	67%	Construction completed.	Do PACE score	3	
341 - Low Cost Low Risk	Safety	Route 5 Taipa-Kaitaia (Oruru Rd, Fairburn Rd & Peria Rd)	101%	Construction completed.	Do PACE score	3	
341 - Low Cost Low Risk	Safety	Route 7 Matauri Bay Loop Roads	120%	Construction completed.	Do PACE score	3	
341 - Low Cost Low Risk	Safety	Okaihau Triangle between SH1, SH10 and the Mungamuka's	5%	Signages manufacturing and construction/ installation are underway	Continue manufacturing and installation of signs	3	Possible delay due to supplier capacity
341 - Low Cost Low Risk	Safety	OPEX including SNP & SPI Project Management	63%	Project added to programme November 2020 for delivery through safety team. Updates pending.	Project added to programme November 2020 for delivery through safety team. Updates pending.	3	Project added to programme November 2020 for delivery through safety team. Updates pending.
341 - Low Cost Low Risk	Seal Extension - Subsidised	Church Rd RP 13317 - 15017	21%	Enabling works well progressed with clearance for width/drainage completed.	Culvert replacement continuing in January, along with continuation of rock shoulder support walls.	3	medium risk- monitor. Preliminary estimate provided with the PDR indicates the cost of construction will exceed available budget. Will likely need to value

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Category	Sub-activity	Location	% Complete	Monthly Update	Next month planned activities	Risk	Risk Comments
				Culvert replacements in progress along with construction of first rock shoulder support wall.			engineer the design with FH to fit the available budget.
341 - Low Cost Low Risk	Seal Extension - Subsidised	Koropewa Rd RP 15 - 1833	1%	Enabling works well underway with clearance for width/drainage/culverts largely completed.	Enabling works (drainage/clearance) to be completed in January along with the construction of the concrete edge support beams for guard-rail. Shoulder undercuts will also commence in January.	3	As noted, the overall estimate exceeds the allocation, however this will be monitored as there are opportunities to reduce cost. (also PS items). The private watermain within the road corridor does present some risk, however this is within the shoulder and is being managed through good comms with the asset owner(s).
341 - Low Cost Low Risk		Hobson Ave Ped Crossing	1%	Project added to programme November 2020 for delivery through safety team. Updates pending.	Project added to programme November 2020 for delivery through safety team. Updates pending.	3	Project added to programme November 2020 for delivery through safety team. Updates pending.
341 - Low Cost Low Risk		Keith Kent 20/21 & 21/22 projects. Roadside Barriers (Guardrails) and Associated Improvements	3%	Project added to programme November 2020 for delivery through safety team. Updates pending.	Project added to programme November 2020 for delivery through safety team. Updates pending.	3	Project added to programme November 2020 for delivery through safety team. Updates pending.
341 - Low Cost Low Risk		Keith Kent 20/21 & 21/22 projects. Audible Tactile Profile/Structural Road Markings (HRRR WC341)	0%	Project added to programme November 2020 for delivery through safety team. Updates pending.	Project added to programme November 2020 for delivery through safety team. Updates pending.	3	Project added to programme November 2020 for delivery through safety team. Updates pending.
341 - Low Cost Low Risk		Keith Kent 20/21 & 21/22 projects. Ped & Cycle Traffic Calming Improvements	28%	Project added to programme November 2020 for delivery through safety team. Updates pending.	Project added to programme November 2020 for delivery through safety team. Updates pending.	3	Project added to programme November 2020 for delivery through safety team. Updates pending.
Cycle Trail Unsubsidised	Cycleways	Pou Herenga Tai Cycle Trail NZ Heritage	0%	Engaged with the contractor to start Pou installations. Programmed works for Feb 2021.	No work planned until Feb 2021.	3	4 month delay while Iwi and Hapu agree final locations for pou installations. Budget surplus to be declared.
Footpath Renewal Unsubsidised	Footpath Renewal	SH12 Opononi	56%	All issues resolved and work can start again. Planned for Feb 2021.	No work planned until Feb 2021.	3	Project was delayed 3+ months while Police incident was being resolved.
New Footpaths - Unsubsidised	New Footpath	Te Hiku Ward: Foreshore Rd - Tasman Heights to Toilets	0%	Construction Pre Award phase	Commence construction	2	Tender price significantly higher than original budget. Award pending council approval to reduce scope and increase budget.
New Footpaths - Unsubsidised	New Footpath	BOI-Whangaroa Ward: SH11 Kaipatiki Rd to York Rd	0%	Reviewed and accepted final concept design. Forwarded to NZTA for review, acceptance and safety audit.	After NZTA - posably engage WSP to proceed with concept design and approve for final construction design.	2	Cost likely to exceed budget and construction may be deferred due to scope change (design around Underslip) and NZTA approval required to reallocate state highway road space.
New Footpaths - Unsubsidised	New Footpath	Kaikohe-Hokianga Ward: Kohukohu Road Manning to Marriner	0%	Construction Pre Award phase	Commence construction	3	2-3 month design phase delay predominantly due to additional sites added and prioritised for MBIE Redeployment works.
New Footpaths - Unsubsidised	New Footpath	Long Beach Road footpath corner to carpark-Russell	100%	Complete	Complete	3	
New Footpaths - Unsubsidised	New Footpath	Kaikohe-Hokianga Ward:Placeholder - Community Board to advise	0%			1	Programme to be supplied by CB
Redeployment Package	New Footpath	Te Hiku Ward: Donald Ln to WINZ on N Park Drive	5%	Construction Pre Award phase	Commence construction	2	Tender price significantly higher than original budget. Award pending council approval to reduce scope and increase budget.
Redeployment Package	New Footpath	Te Hiku Ward: Foreshore Road, Taipa	109%	Complete	Complete	3	
Redeployment Package	New Footpath	Te Hiku Ward: Mamaru Road	137%	Complete	Complete	3	
Redeployment Package	New Footpath	Te Hiku Ward: Point Road, Taipa	181%	Complete	Complete	3	
Redeployment Package	New Footpath	BOI-Whangaroa Ward: Length of Blacks Road	100%	Construction completed.	Defects period ends Oct 2021	3	
Redeployment Package	New Footpath	Kaikohe-Hokianga Ward: Kaikohe Footpath Signal Stn Rd, Omapere	65%	Finalised RSA, reviewed and accepted Price from contractor and started construction.	Continue with construction.	3	Cost exceeded budget and additional budget was used from Walking Facilities.
Resilience - Unsubsidised	Resilience	Panguru Road	0%	Budget is surplus to requirements for the in-scope Panguru works.	Consider and seek approval to redistribute or formally surplus the budget.	2	Budget may need to be redistributed as local share for section C works pending confirmation of funding arrangement between NRC/FNDC. On-hold until NRC/FNDC agreement and requirements confirmed.
Seal Extension - Unsubsidised	Seal Extension	Balance of carry-over amount from 19/20	0%			2	Programme to be supplied and budget to be confirmed
Seal Extension - Unsubsidised	Seal Extension	Porotu Rd RP 0 - 1380	79%	Site sealed and line-marked in December.	Practical completion and snag walk- over to be completed by NTA in early January.	3	

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Category	Sub-activity	Location	% Complete	Monthly Update	Next month planned activities	Risk	Risk Comments
Seal Extension - Unsubsidised	Seal Extension	Puketi Rd RP 0 - 1000	72%	Site sealed and line-marked in December.	Practical completion and snag walk- over to be completed by NTA in early January.	3	
Seal Extension - Unsubsidised	Seal Extension	Pungaere Road	3%	Enabling works underway with clearance for width and water- tabling completed.	Drainage (Rip Rap and Culvert) works will commence in January and Pavement works will follow once Pavement Design has been agreed and approved.	3	DRAINAGE: The site has some historic drainage discharge issues to remedy - the section from RP10200 - 11080 currently has a single discharge point, which causes issues for the land-owner. Additional discharge point has been sought through consultation with an upstream property, however agreement with the owner is unlikely. Alternative discharge arrangements are currently being investigated/considered with Ventia. STOCK UNDERPASS: The construction of a stock underpass at RP9625 and is being managed by the property owner. The design of this is still underway and construction may not meet the required timeframes.
Special 100% FAR	New Footpath	Tau Henare Drive - Waitangi Trust	99%	Construction completed.	Defects period ends Sep 2021	3	Budget surplus to be declared. Potential archaeological site uncovered during excavations. Investigations and discussion with Heritage NZ ongoing.
Special 100% FAR	Sealing Chip seal	Additional funding from Waitangi Trust for Tau Henare Drive (south region)	37%	discussions with IWI held and aiming to complete post Xmas	discussions with IWI held and aiming to complete post Xmas	3	
Walking Facilities - Unsubsidised	New Footpath	Contingency	0%	Contingency for New Footpaths programme. Cost exceeded budget for Signal Station Road and additional budget was used from Walking Facilities.	Refer Signal Station Road updates	3	Cost exceeded budget for Signal Station Road and additional budget was used from Walking Facilities.

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2021-24 NATIONAL LAND TRANSPORT PROGRAMME (NLTP) INVESTMENT SIGNALS – NOVEMBER 2020 WAKA KOTAHI NZ TRANSPORT AGENCY



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A successful 2021–24 NLTP:

- delivers on the Government's transport priorities
- invests in a multi-modal land transport system that is safer, more accessible, and that reduces harm to people and the environment
- supports the government's COVID-19 recovery programme
- provides the platform for future investment in the land transport system.

Context - constraints and environment

- The government's strategic priorities in the Government Policy Statement on land transport 2021 (GPS) are safety, better travel options, improving freight connections and climate change. •
- There will be an ongoing focus on maintaining the transport system at acceptable levels of service (our base), taking account of these strategic priorities. This will account for a large proportion of available revenue.
- New investment above this base will be strongly driven by the strategic priorities. The GPS 2021 also sets investment expectations for the four Government Commitment programmes:
 - o Auckland Transport Alignment Project (ATAP)
 - Let's Get Wellington Moving (LGWM)
 - the Road to Zero safety strategy
 - o the New Zealand Rail Plan.
- The GPS 2021 has set minimum expenditure targets for each activity class which, when summed, are close to the current forecast revenue for the National Land Transport Fund (NLTF) during 2021–24. The lower limits for all 11 activity classes require minimum expenditure of \$12.9 billion from a forecast revenue of \$13 billion.
- Forecast revenue is based on there being no further Alert Level 3 or 4 COVID-19 lockdowns. As with
 an NLTP, there are a number of challenges and we will need to juggle priorities to give effect to the
 GPS and deliver the best outcomes for New Zealand.
- More than 90% of anticipated revenue from the NLTF for the 2021–24 NLTP will be required to meet
 existing commitments for projects underway and for continuous programmes to maintain existing
 levels of service. Unless revenue is higher than forecast, there will be constraints on funding new
 improvement projects and investment in activity classes would be mostly around the lower limit in
 the GPS range.
- We recognise some activity classes, such as state highway and local road maintenance and public transport services are likely to require greater investment than the bottom of the activity class range.
- Activity classes where additional investment capacity is available are the new Public Transport Infrastructure, Coastal Shipping and Road to Zero activity classes - where forecast commitments is less than the lower range for each activity class.
- Funding at a higher point within the GPS 2021 activity class ranges would require additional revenue and we are working with the Ministry of Transport to identify what alternative revenue sources may be able to be accessed.

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- Overall, investment in the land transport system across Crown funding, local share and the NLTF, is expected to increase from \$18.5 billion in 2018–21 to more than \$20.8 billion in 2021–24.
- There is a significant programme of work underway the Government has already committed Crown funding to one of the largest ever land transport infrastructure programmes.

Commitments - what's already committed in the 2021-24 NLTP?

- More than 90% of anticipated revenue from the NLTF will be required to meet existing commitments for projects underway and for continuous programmes to maintain existing levels of service in the 2021–24 NLTP.
- We will need to prioritise projects to deliver on the GPS strategic priorities and investment expectations over and above these commitments there will need to be trade-offs.

Signals – our investment priorities

Our job, working with our investment and delivery partners, is to give effect to the GPS while taking into account Regional Land Transport Plans. This means optimising investment to deliver the results sought under the GPS strategic priorities.

- Safety developing a transport system where no-one is killed or seriously injured.
 - \circ developing and implementing speed management plans throughout New Zealand.
 - delivering infrastructure improvements and speed management at the highest risk areas of the state highway and local road network.
 - o increasing the emphasis on maintenance activities that deliver high safety outcomes.
 - ensuring local road safety promotion aligns with the nationally delivered advertising and education programme.
 - expanding the safety camera network and investing in road policing.
- Better travel options providing people with better transport options to access social and economic opportunities.
 - delivering on the government commitments in the urban areas of Auckland and Wellington investing in ATAP and LGWM.
 - focusing on delivering mode shift in the other four high-growth urban areas, Queenstown, Christchurch, Hamilton and Tauranga.
 - improving transport options for people who face barriers to access, e.g. those who are living in poverty or with disability.
- Climate change developing a low carbon transport system that supports emission reductions, while improving safety and inclusive access.
 - delivering on the government commitments in the urban areas of Auckland and Wellington investing in ATAP and LGWM.
 - managing demand e.g. by prioritising shared and active modes at peak times, use of pricing tools, and through good urban form – to reduce greenhouse gas emissions.
 - investing in active and shared modes walking and cycling, public transport infrastructure and services, and other shared services – to get more people out of their cars.

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- ensuring our investment accounts for climate change impacts (in relation to both mitigation and adaptation) when designing solutions.
- investing in measures that reduce the impacts of transport on people (from noise and air pollution) and the environment.
- o improving freight connections improving freight connections for economic development.
- investing in the heavy rail network to enable KiwiRail to deliver the Rail Network Investment Programme.
- o championing freight efficiency by ensuring our networks are reliable and resilient.
- researching options to increase the role of coastal shipping in supporting the efficient movement of freight.

Developing Regional Land Transport Plans (RLTPs)

We'll look for RLTP programmes to:

- be outcomes-based, supported by clear investment objectives, benefit measures and metrics
- show a good understanding of how your performance is benchmarked against other councils
- indicate how you're applying a whole-of-system approach and making the most of the existing network
- show value for money
- align with investment priorities using the Business Case Approach
- be developed in partnership with the wider transport sector within and across regions
- reflect iwi engagement/input.

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VENTIA – CONTRACT 7/18/101 ROAD MAINTENANCE AND RENEWALS -MONTHLY REPORT



EXECUTIVE SUMMARY

A short month and a short report to reflect this. Some light reading for the last day of work, while gorging yourself on Christmas mince tarts and idle chat at the water cooler about your summer holiday plans.

December has been a very dry month reminding us of why we carry out Wet/Roll/Grades on the higher volume gravel roads around the network. We successfully completed Waiare Rd, Waikare Rd, Waikino Rd, Rawhiti Rd (North), Wharau Rd to name a few.

Porotu Rd seal extension was sealed and line marked and is looking fantastic, with the locals very happy. Okaihau Rd rehab was also sealed with Horeke Rd due to be completed in late January. Pungaere Rd and Koropewa Rd seal extension enabling are nearing completion, with aggregate due to hit the ground in January. Another smaller "seal extension" completed on Umarewa School Rd, we have really enjoyed the dust seals this season around Marae's and Schools in rural areas. I hope these continue into the future. A great way to work with the community and show them what we can achieve as a team.

Footpath replacement and widening completed on Otiria Rd, Moerewa with a couple more weeks left in the area in the New Year. The crew took today (Tuesday) off footpath works to prepare our Xmas Hangi.

Hayters Rd heavy metalling site was completed in time for the Forestry Contractors to start hauling logs out in the New Year.

During the Xmas period our inspections and routine patrols will continue along with call out teams on standby should anything occur.

Meri Kirihimete and a Happy New Year to you all. It has been a hectic year for all of us, I hope you get a good break and talk in 2021 3

See you in January.



Hangi Prep done!

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WORK PROGRAMME

A total of 1485 individual work items were completed throughout the month of December which 1132 were routine find and fix issues, 44 were cyclic or part of annual rounds, 144 were programmed works, 8 were renewals/capital projects, and 157 were callouts or emergency response works.

January 2021 forward works programme has been submitted in RAMM.

ROUTINE WORKS COMPLETED

Routine maintenance activities completed in December:

- 276 sealed potholes repaired
- 1022 unsealed potholes repaired
- 114 km of unsealed roads graded equating to 14% of the total unsealed network.

DRAINAGE MAINTENANCE AND RENEWALS

Drainage maintenance activities completed in December:

- 181 Culvert ends cleared
- 2348m of heavy water tabling
- 33m Culvert pipes replaced/new



Routine Culvert Clearing - Not a bad view - Newton Rd

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ROUTINE INSPECTION REPORT

Sealed - There are currently 9 sealed inspections running overdue.

Unsealed - There are currently 0 un-sealed inspections running overdue.

Drainage - There are currently 56 drainage inspections running overdue.

ORDERED WORKS

- 295m² of footpath replacement/renewal was completed in November.
- 26 m³ of maintenance metal was applied to the unsealed network.

The footpath team spent a couple of weeks before Christmas on Otiria Rod, Moerewa replacing and widening a 900 mm wide footpath out to 1.5m. In January the plan is to complete Snowdon Ave and SH1 footpaths in Moerewa and then move onto Waima and Rawene next.

Dust seals were completed on Omanaia Rd and Umarewa School Rd in December. This leaves just Motukiore Rd left to seal in February.

Waipiro Bay – Stage 2 involved a very complicated Traffic Management plan prepared by David Caswell, once we worked out that the detour would be over 40 minutes (map below) the call was made to switch to a night shift and advised residents thanks to Cushla and FNDC comms via Facebook and rather large Variable Message Boards (VMS) being installed the week prior advising residents past Waipiro Bay Bridge of the impending closure. The job took one night with chipsealing completed on 21/12/20 just in time for the holiday season!





Otiria Rd, Moerewa - Footpath replacement



Umarewa School Rd – Dust Sealing site

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ROAD FURNITURE ACTIVITY

- 65 new signs installed or replaced (damaged or missing)
- 38 signposts replaced
- 14 signs re-re-erected or straightened

STRUCTURES

• 121m Rail barrier renewal

MBIE FUNDING

Moerewa Flood Funding

Otiria Rd/Ngapipito flood relief funds spent on watertabling and tiding up the area for the local residents. The old petrol bowser area is looking fantastic. Culverts to be upgraded to 600mm in January 21

Tree Removal

No trees removed in December, we have programmed in Kapiro Rd Shelter Belt overhang trimming, Wiroa Rd and Waimate North Rd trees to be removed in January.

Wet/Roll/Grade

The remainder of the list was completed in December with some really nice pavements now set for the busy summer holiday period. Roads included, Waikare Rd, Waiare Rd, Rawhiti Rd (North), Bayley Rd, Haruru Falls Rd, Waikino Rd, Wharau Rd, Oihi Rd.

RESEALS

The reseals programme has been moved to recommence in January once chip stockpiles have replenished.

PAVEMENT REHABS

Okaihau Rd – RP1235 - 2311 Physical Works – Sealed and linemarked on 17/12/20

Horeke Rd – RP11570 - 12580

Physical Works – Commenced on 21/10/20, overlay to commence after Christmas now. Enabling works complete. Target Completion – 10/2/21

Seal Extensions

Koropewa Rd – RP15 – 1833

Physical Works – Commenced on 9/11/20. All drive way culverts installed in December 20. Target Completion – 15/2/21

Pungaere Rd – RP8820 - 12410

Design – 100% completed, to be presented on 23/12/20 Physical Works – Commenced 16/11/20 – enabling works prior to Christmas with pavement after Christmas.

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Target Completion – 15/3/21

Ngapipito Rd – RP3500 - 8435 Test Results – Received, awaiting on Soaked CBR's on site material Survey – 100% complete Design – 90% complete. Final survey data sent to designer. Report to be sent in the first week post Xmas break. Physical Works – Commencing in January now. Target Completion – 31/4/21

ROAD ACCIDENT REPORT

No road accidents to report this month.

CUSTOMER SERVICE ISSUES/COMPLAINTS

RFS statistics for November were available at the time of this report. Ventia received 107 service requests during October and had 0 overdue. The below graph shows the number of RFS's received by our branch each month during the NTA contract and any overdue.



COMPLIMENTS

We received the following compliment on 1/12/20, NRC, NTA and Ventia worked together to remove a large pool of standing water near the edge of the beach.

Hello,

Just a quick update on things from Te Uenga.

The team from Broad Spectrum have just completed what I think is a superb job on the problem creek at Te Uenga. After several months of toing and froing with the FNDC and the NRC, I'm delighted to be able to say thank you to all involved in bringing this job to a satisfactory conclusion. As long as nature doesn't decide to throw something at us out of left field and undo all the good work, I think we may resolved the problem, or

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worst case, reduced it significantly. What once was a 2m deep, foul smelling, dangerous pond at the outfall of the culvert that dribbled onto the beach, is now a back filled graded outfall, that providing we can keep it open, will spill directly onto the beach and out to sea as it once did. I have attached a couple of photographs that show the final result.

To all those involved, from Stuart Beaven initially, Stacey Le Noel later on for her prompt and courteous follow up, Joseph and yourself Doug for being so attentive and Jamie for providing such an expert crew from Ventia who actually did the job, thanks from all residents at the Bay. Can I provide one special mention... and that goes to a young guy by the name of James Hartley who drove the digger and sculpted the restoration. What an excellent, professional and genuine nice guy to have on your team.

Please would you pass our appreciation on to him directly.

I know you guys operate on tight budgets and have a host of competing projects so thanks again for giving this job due priority.



Te Uenga Bay – Culvert outlet to Beach foreshore

Kind regards,

Mike

RAMM ISSUES

Pocket RAMM is still experiencing issues out in the field where assets and dispatches randomly disappear off the screen. This causes major problems with inspections as often assets are not showing on the map so they will be missed in the inspection. As well as jobs/dispatches being duplicated because they are not showing on the screen.

This issue appears to be widely spread and not just for the FNDC maintenance contract.

RAMM support have known about this issue since May but started a couple of months before then. They have tried several fixes without success.

HEALTH AND SAFETY

No lost time injuries have occurred in our Puketona branch since 29th March 2012, during December we had no notifiable incidents to report.

ENVIRONMENT

In December we had no notifiable incidents to report.

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ANNUAL ROUTINE ACTIVITY ACHIEVEMENT

Routine and cyclic rounds start at the financial year.

Biennial Painting of All Rails	0% completed
Biennial Parapet Painting of Bridges	0% completed
Annual Cleaning of EMP's	0% completed
Annual Sucking of All Sumps	0% completed
Biannual sweeping	0% completed
Urban Vegetation Spraying	11% completed
Rural Vegetation Spraying	70% completed

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FULTON HOGAN -NORTH AREA MAINTENANCE NETWORK CONTRACT 7/18/100 MONTHLY REPORT



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There is no December Report this month.

NOVEMBER SUMMARY OF WORK

ltem Number	Item Number Description					
CM01.1.1	CMngt Spread - Sealed Pave Mtce WC111					
CM01.1.10	CMngt Spread - Drainage Renewals WC213					
CM01.1.11	CMngt Spread - Sealed Rehab WC214					
CM01.1.12	CMngt Spread - Structure Cmpnt Replace WC215					
CM01.1.13	CMngt Spread - Traffic Service Renwl WC222					
CM01.1.2	CMngt Spread - Unsealed Pave Mtce WC112					
CM01.1.3	CMngt Spread - Routine Drain Mtce WC113					
CM01.1.4	CMngt Spread - Structure Mtce WC114					
CM01.1.5	CMngt Spread - Traffic Service Mtce WC122					
CM01.1.6	CMngt Spread - Cyclepath Mtce WC124					
CM01.1.7	CMngt Spread - N&AMngt WC151					
CM01.1.8	CMngt Spread - Unsealed Rd Metal WC211					
CM01.1.9	CMngt Spread - Sealed Rd Surfacing WC212					
CM01.2	Performance Incentive (PS/mth)					
DR00.1	Drainage Mtce Dayworks (PS)					
DR00.2	Drainage Renewal & Improvements Dayworks (PS)					
DR01.1	Routine Drainage Mtce					
DR01.1.1	Drainage Mtce (Routine)					
DR02.2	Watertable Mtce - Heavy					
DR02.3	Watertable Mtce - Rip Rap supply & place					
DR04.1	Culvert Marker Replacement					
DR05.5	K&C - Subsoil Drainage 100mm dia					
DR06.10	Culvert Headwalls (Concreted Rock) <900mm dia					
DR06.2	Culvert replace 375 dia 0 - 1.5m depth					
DR06.3	Culvert replace 450 dia 0 - 1.5m depth					
DR06.4	Culvert replace 600 dia 0 - 1.5m depth					
DR06.7	Storm Boss pipe or equiv 375 plastic supply & install					
DR08.6	Channel Sweeping High Leaf Fall					
DW1.10	DW - Excavator 07 - 14 tonne					

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ltem Number	Item Number Description
DW1.11	DW - Excavator 15 - 25 tonne
DW1.15	DW - Vibrating roller 6 - 10 tonne
DW1.19	DW - Truck (4 - 6 m3)
DW1.2	DW - Grader (12 - 14 tonne)
DW1.20	DW - Truck (6 - 8m3)
DW1.21	DW - Truck & trailer (8 - 16m3)
DW1.7	DW - Tractor (Mower/Broom)
DW1.9	DW - Mini Excavator < 6 tonne
DW2.1	DW - Labourer
DW3.1	DW - Materials (PS)
DW3.2	DW - Materials On-Cost (15%)
FP02.1	Path Concrete Slab Placement
FP02.5	Path Premix Placement
IN01.1	Sealed Road Core Inspections
IN02.1	Unsealed Road Core Inspections
IN03.1	Drainage Inspections
SG01.1	Routine Sign Mtce
SG01.1.1	Sign Mtce (Routine)
SG04.12.1	Sign - Street name(200mm) Arterial/Rural <1100mm VIP d/s
SG04.12.2	Sign - Street name(200mm) Arterial/Rural >1100mm VIP s/s
SG04.13.1	Sign - Street name(150mm) Residential Rds 800mm VIP d/s
SG04.13.3	Sign - Street name Residential Rds NO EXIT supplementary
SG04.16.1	Sign Post - Wooden up to 3.5m long white gloss painted
SG04.16.2	Sign Post - Wooden 3.6 - 4.0m long white gloss painted
SG04.2.1	Sign - RG 600mm dia all circ VIP d/sided
SG04.2.4	Sign - RG-6 'Give Way' 750mm HI
SG04.2.5	Sign - RG 17.1 Keep Left Twin 300x600mm
SG04.3.1	Sign - Chevron Mini PW67 VIP s/sided
SG04.7.1	Sign - PW 600 x 600mm diamond VIP s/sided
SG04.7.2	Sign - PW 750 x 750mm diamond VIP s/sided
SG04.7.3	Sign - PW 900 x 900mm diamond VIP s/sided
SG04.8.1	Sign - PW Supp 600 x 250mm VIP s/sided
SG04.8.3	Sign - PW25 Supp Curve Advisory Speed

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ltem Number	Item Number Description				
SP00.2	Sealed Pvmt Renewals Dayworks (PS)				
SP01.1	Routine Sealed Repair of Potholes				
SP01.1.1	Sealed Repair of Potholes (Routine)				
SP02.1	Routine Edge Breaks (<=1m)				
SP02.1.1	Edge Breaks (<=1m) (Routine)				
SP03.1	Temporary Pvmt Failure Repairs				
SP07.1	Sealed Rip and Remake				
SP09.2	High Shoulder removal				
SP10.1	Stabilisation Repairs 0-20m ²				
SP10.2	Stabilisation Repairs >20m ²				
SP11.1	Digout 0-300mm depth Excvte&import&backfill				
SP11.5	Digout Matting/Geotextile				
SP12.1	Routine Detritus Removal				
SP14.1	Resurfacing Design and Liaison				
SP15.11	Chipseal - Construct VF G5 (Inclusive of bitumen)				
SP15.12	Chipseal - Construct VF G6 (Inclusive of bitumen)				
SP15.17	Chipseal - Construct Wet Lock G5 (Inclusive of bitumen)				
SP15.5	Chipseal - Construct G2 Chip (Conventional Binder)				
SP15.6	Chipseal - Construct G3 Chip (Conventional Binder)				
SP16.1	Thin AC - Membrane Seal				
SP16.3	Thin AC14 Supply & lay 50mm (min thickness)				
SP17.2	Rehab (Large) Invest./Design & Liaison(>\$100000) (%)				
SP18.1	Rehab - Cut to waste and dispose				
SP18.2	Rehab - Undercut Shlder Prep (solid measure)				
SP18.4	Rehab - Supply place & compact AP40 Agg (loose meas)				
SP18.6	Rehab - Stabilise 250mm (<2% lime/cement)				
SP18.7	Rehab - First coat seal (G3/5)				
ST01.1	Routine Bridge Maintenance				
TD03.1	RRPMs - Replace & new all colours mono and bi-directional				
TD04.1.1	Newmark - 100mm CL white dash 220 micron with beads				
TD04.1.6	Newmark - 100mm EL white 220micron with beads				
TD04.2.2	Newmark - GIVE WAY Int complete (max 50m long) beaded				
TF01.1	Routine Flexible Marker Post Straighten & Annual Clean				

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ltem Number	Item Number Description
TF03.1	Flexible Marker Posts Replace and Install
TF04.1	Routine Railing and Barrier Mtce
TF04.1.1	Railings and Barrier Mtce (Routine)
UR01.1	Routine Unsealed - Pothole Repairs
UR01.1.1	Unsealed - Pothole Repairs (Routine)
UR02.1	Routine Unsealed - Surface Grading
UR02.1.1	Unsealed - Surface Grading (Routine)
UR02.2	Unsealed - GAP20 or GAP30 Supply place compact mtce agg
UR06.1	UnsPvmtStrgth - GAP40 or GAP65 Supply place compact
UR07.1	UnsWearing Course - Supply cartage place
VC01.1	Routine Vegetation Envelope Mtce
VC01.1.1	Vegetation Envelope Mtce (Routine)
VC04.2	Routine Roadside Mowing (FNDC)
VC04.2.1	Roadside Mowing (Routine)

HEALTH & SAFETY

No injuries this month.

Туре	# during period	# to date	Days since last incident
Lost time injury (LTI)	1	2	81
Medical Treatment Case (MTC)	0	0	886
First Aid Injury (FAI)	0	0	886

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	S Health & Sa	Summary November 21 - Northland			
TRIFR & Sevenity	O	CAMS Actions	ton Nogan	Leadership Safety Action	5 🕥
Dci 2320 0ct	uries Severity 12 Con abox 00 168.9	Completed 89	Due 115	Completed 287 126%	Target 227
Ca2079 Seriatio April	an Hara olani	Actions Onsed On Time High & Ditterne	76% 100%	YTO Targe: Achievement (C 1,163 /	2648 1 44%
Subble Verification		Safety Improvements	٥	Certified Safe	\odot
% Subble Verification on 2000 92%		Reported Y ····	larget 15	Due This Month	Due This Month
ر 5m2280 س	on 2021 /er 2021	Jul 2020 On 2020 an 2020	1 Apr 2021	Certified Sale by Erchof Moeth	88%
Living Safely		filter dashbo	bard		>> this menths dashboar

QUALITY AND TRAINING

Environmental non-compliance notices issued Nil non-compliances to report. Notice to Contractor issued Nil. Training Inductions for Subcontractors. RAMM Issue for the month Nil. CUSTOMER SERVICE

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FEEDBACK

RFS: 4036780 Leanne Covich 02-Dec-2020 15:31:07 Thank you for grading and metal on Pukewhai Rd - Tanya said it was an excellent job done. Leanne Covich

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DECEMBER PROGRAMME

The maintenance activities programmed for December 2020 relate to routine sealed and unsealed maintenance activities such as grading, sealed and unsealed potholes, unsealed road metaling etc.

- The Pawarenga Road Pavement Rehabilitation (Site 1) enabling works are well under way and digouts are being completed, so metal will be starting to be run in.
- Watertabling, clearing, tree work, culvert replacement, will start and be ongoing on Peria Rd seal extension, seal first 1.3 km.
- Church Rd Seal Extension drainage and enabling works will continue.
- Reseal patches will continue.

Closedown on December 18th and return 5th January

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WAKA KOTAHI NZ TRANSPORT AGENCY -NORTHLAND ACTIVITY UPDATE



Activity	2018-21 NLTP	Completion	Progress	Commentary	
State highway maintenance, operations and renewals	\$75.40M	5%	Amber	Waka Kotahi has commenced this year's programme and completed the works deferred due to COVID19. Our finalised programme is 110 lane km's and to date we have completed 12 km. SCRIM sites planned to be completed in Dec 2020.	
Low Cost / Low Risk	\$5.3M	40%	Amber	Our finalised programme is 110 lane km's and to date we have completed 12 km. SCRIM sites planned to be completed in Dec 2020. Far North District Council Projects Resilience projects: SH1 Otiria Flood Mitigation due to COVID19 has been tendered but the start date is 18th January; SH10 Bushpoint works are 90% completed. Safety projects: Moerewa Pedestrian Safety raised platform pedestrian crossing design completed ready for final consultation prior to works being completed. Kaeo Pedestrian Safety concept design completed installation after Waitangi weekend. Walking and Cycling Projects: SH11 Haruru Falls Design – geotechnical works review completed. NTA have provided an alternative design Waka Kotahi are reviewing. SH12 Omapere to Opononi 3km – Building a shared user path in collaboration with NTA work to tie into current NTA renewals work. SH1 Kawakawa Ped Crossing – A pre-lim design has been completed for a raised platform working with FNDC Innovative Streets Project team. SH1/North Road (Kaitaia) Intersection design is completed. Works will begin in late January 2021 with street light installation before pavement works in mid-February 2021. Kaipara District Council Projects SH12 Signs & Delineation West of Maungaturoto 80% completed to finish prior to Christmas. Other Four projects are to be delivered this financial year with signage targeting safety on SH15, SH11, SH10 and SH1 Cape Reinga. All are in design with delivery early January. Mangamuka Gorge: The Gorge is closed due to the July Storm Event. Remedial works started with double shifts to complete the piles to secure the road we have. Final design for realignment is 95% complete and final costs for review. On target to open to one day over Christmas for light vehicles. Slip 7 is part of the second phase of works as this will have piles and the team will move to this site once all piles at site 8 are completed.	
SH1: Dome Valley Safety Improvements	\$31.7M	Late-2021	Green	Work commenced on Stage 3 late November resulting in the temporary closure of the south bound passing lane north of the Dome Valley summit. Stage 5 is planned to commence this month, and this will result in the temporary closure of the north bound passing lane south of the Dome Valley summit. During these closures the team will widen the road and install soil nails to help stabilise the bank. Eventually both passing lanes will be permanently closed to enable a wider centre line in places and flexible median barriers in others, to improve safety on this stretch of road. Stages 2 and 4 are nearing completion. Flexible safety barriers will be installed in Stage 2 later this year and in Stage 4 early next year. SH1 Dome Valley NZ Transport Agency	
Northland speed review		2021	Green	SH10 Awanui to Kaingaroa - a second round of public consultation is underway on proposed new speed limits along SH10 between Awanui and Kaingaroa. We have refined the proposal we consulted on late last year to include variable speed limits outside two marae on this corridor. Consultation closes on Sunday 20 December 2020. Speed Review Locations NZ Transport Agency	
 SH1 Whangārei to Te Hana Whangārei to Port Marsden Highway - NZ Upgrade Programme Port Marsden Highway to Te Hana 		Late – 2027/8	Green	The emerging preferred corridor for the four-lane corridor between Whangārei and Port Marsden Highway (SH15) was announced W/C 23 November. The emerging preferred corridor includes upgrading the current state highway to four lanes (with some sections built offline to straighten out curves), with a separated walking and cycling path. Ground investigations and affected landowner consultation is underway, with further public engagement following in early-2021. The preferred option will be confirmed by mid-2021, through the development of the Single Stage Business Case (SSBC). Lodgement of Notice of Requirement and resource consents is currently programmed for late-2021, with construction programmed to commence in late-2023/24. The Port Marsden Highway to Te Hana section is not funded by the NZ Upgrade Programme and therefore funding is required to complete the SSBC. <u>Whangarei to Te Hana NZ Transport Agency</u> <u>Whangarei to Port Marsden Highway</u>	

Activity	2018-21 NLTP	Completion	Progress	Commentary	
SH1 Whangārei to Wellsford Standard Safety Intervention	\$4M	Underway	Green	Procurement for construction is underway for Whangārei to Port Marsden Highway (Northern) section. Subject to funding and approvals, implementation is programmed for early-2021.	
(Road to Zero)				Construction (at the northern extent) will be coordinated with the Loop Road project.	
				Procurement for detailed design and consenting for the Central (Port Marsden Highway to Schultz Road) and Southern (Piroa Stream Bridge to Wellsford) is underway, with pre-implementation programmed to start early-2021.	
				SH1 Whangarei to Wellsford NZ Transport Agency	
SH1 Warkworth to Wellsford		Route protection	Green	Resource consent hearing has concluded. Auckland Council's decision on resource consents and recommendation on the Notice of Requirement (NoR) is due 15 December. Appeals on the resource consents are to be lodged by 26 January and Waka Kotahi's decision on the NoR will be due by 17 February 2021.	
				SH1 Warkworth to Wellsford	
SH1 corridor improvements –	\$53.34M	Early-2020	Green	COMPLETED	
Whangarei (Tarewa Road)				SH1 Tarewa Road Intersection Improvements NZ Transport Agency	
SH1 Loop Road Safety improvements	\$48.76M	Early 2022	Amber	State highway traffic is now on the single lane roundabout at Loop Road/SH15. Minor intersection improvements commence for Otaika Valley Road (SH15)/Loop Road intersection early January.	
				Regional consents have been lodged with Council for the dual-lane scheme (additional southbound lane and new two-lane bridge).	
				SH1 Loop Road Safety Improvements NZ Transport Agency	
SH10 Kaeo bridge	\$21.95M	Late 2022	Amber	This project is at the end of the design phase.	
				Resource consents have been approved by Far North District Council and Northland Regional Council. All property agreements have been signed, an archaeological authority has been issued and a wildlife permit has been granted.	
				We are working with local iwi/hapū on cultural design elements.	
				Kaeo Bridge NZ Transport Agency	
SH10 Waipapa corridor improvements	\$24.5M	Early 2021	Green	The roundabout and SH10 have now been sealed with asphalt and much of the kerbing in these areas is complete. Road pavement work and kerb and footpath installation continues across the site.	
				The roundabout and SH10 approaches are on track for completion by December 2020, with the remainder of works to be complete in April 2021.	
				Work will shut down from 23 December to 5 January to help keep holiday traffic flowing through the town. No major works are planned for SH10 or Skippers Lane until after Waitangi weekend.	
				SH10 Waipapa Corridor Improvements NZ Transport Agency	
SH1/11 Kawakawa intersection improvements (NZ Upgrade Programme)	\$6M	Mid 2021	Green	Traffic flowing through temporary intersection and construction of retaining wall underway. Roundabout component is being constructed with asphalting scheduled for early December.	
SH10/11 Puketona Junction intersection improvements (NZ Upgrade Programme)	\$15M	Mid 2021	Green	Temporary roading for SH10 and SH11 traffic sealed and temporary intersection now operating. Roundabout is under construction off line with asphalting scheduled for early December.	
SH12 Rawene Road intersection improvements (NZ Upgrade Programme)	\$0.5M	Late 2020	Amber	Construction of safety improvement elements is scheduled for December.	

3 WATERS OPERATIONS

Water, wastewater and storm water in alliance with Far North Waters. To enable an integrated and flexible approach to Water Management.

EXECUTIVE SUMMARY

- During the month of December Far North Waters experienced no LTI's and one MTI, and we are currently operating with 1,188 days LTI free. We attended 422 requests for service (RFS) call outs in December, up from 356 in November. Planned Maintenance (PM) for December was 100% out of a total of 48 jobs. All the backlog for Planned Maintenance work has now been completed.
- Almost all of December was spent working through the 3 Waters Reform DIA request for information spreadsheet in partnership with the FNDC team working on the same document. While a significant proportion of the spreadsheet was completed prior to the Christmas break, much of the required information is still outstanding and will be completed on return to work in the New Year.
- Post pH dosing is now achieved using caustic soda instead of Sodium Carbonate. It has been a success and saves time and effort for the operator. This change was brought about after a national shortage of sodium carbonate occurred before Christmas.

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CHALLENGES

- Kerikeri WTP: During summer months filling of the Waipapa water reservoir has been an issue over the years due to certain parts of Kerikeri feeding off the supply line to Waipapa from Kerikeri. To date we have removed the water carriers from filling and have been able to reduce filling times, which allows us to not fill at peak times. There is a section of watermain to be upgraded outside the police station, which is being completed on Tuesday 12th January, which we are hoping will allow more flow through the water line to help with low pressures.
- Environmental wastewater spill to water: On the 27th of December there was an environmental spill at 2 Du Frense Place, Tapeka, Russell. There was a blockage in the gravity wastewater line causing the manhole near the stormwater drain to overflow which goes to the beach. The caller was not impressed with situation of wastewater being in the drain. We followed our process by sampling upstream and downstream. The customer was still very unsatisfied with the service and we were then instructed to pump the water out of the drain which we did. All escalations were made, and signs installed.
- Paihia Water Treatment plant: The plant has been pushed to its extreme with the plant producing 150 cubes which is the maximum the plant can make. With Tourism being at its highest population in years this has really put pressure on our operators and the plant. The water carriers that were filling from Te Haumi were shifted to fill from Moerewa and Kaikohe so the plant could keep up. Once the trucks were removed, we had 149 cubes coming into the plant and 148 cubes leaving the plant meaning we had one cube left. The reservoir was unable to recover for days as the usage was so high. Also, pH levels in the Waitangi River are on the rise. Currently it is 7.9, as it approaches 8 and above, it becomes harder to maintain efficient dosing. We have received two quotes to provide a containerised pH correction unit. Divers were deployed to clean the intake screen before the summer onslaught.
- Kerikeri SLP: The Sewer Low Pressure system is slowly being commissioned by United Civil and new pumps are being installed. A better handover system is required as we are unsure of when pumps will be installed and when we will receive handover of this SLP system. Escalation required.
- Kerikeri new WWTP: Commissioning and testing procedure is in progress; some outstanding jobs must be completed in January.
- Ngawha Sewer Low Pressure system: New pumps arrived and have been installed. We are continuing to get called out to Ngawha for blocked pumps and alarms going off, but it is manageable now due to having spare pumps. We still require some form of comms or letter drops to all communities with the SLP systems on educating them of products you can and cannot flush into the system.

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RISK

The risk identification and assessment process being undertaken for the district water treatment plants with the development of a generic risk universe template for water treatment plants was put on hold in early November due to commitments with the Internal Operating System Audits and then the DIA RFI.

This assessment work will be reinvigorated early in 2021 with a view to have comprehensive risk registers and risk evaluation summaries in place at each of the nice district water treatment plants by mid-2021.

HEALTH AND SAFETY



The one FAI sustained during December was while a staff member was lifting 20 litre containers of Hypo from the tray of Ute. This staff member did not brace herself for the weight causing her to jerk both forearms causing slight pain.

Key Activities

- LTI's & MTI`s Nil
- Asset Strikes Nil
- Equipment Close Call Nil
- First Aid Injury (FAI) One
- Environment incidents One (Tapeka, Russell)
- HSE Management Plan in review
- Kerikeri WWTP Commissioning Audit delivered
- HSE Field staff meeting scheduled 10th December 2020
- Regional HSE meeting scheduled 26 December 2020

CUSTOMERS

The request for service (RFS) total for December was 422, up from 356 in November. The total for December 2019 was 360, and December 2018 was 334. The December RFS count of 422 is an increase of 17% from 2019 and 26% from 2018. Water RFS jobs are starting to increase as we are now in summer, which is putting more pressure on our water crew. We have a new employee starting 11th January which will assist with the increase in water RFS jobs.

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Ongoing Water loss between Omanaia and Rawene WTPs. We were continuing to lose 3 to 4 cubes an hour and were unable to see the leaks while walking the water line. Leak Detection services were called in to assist. On the 20th of December, Leak Detection services were successful in finding two leaks. Once repairs were complete water loss returned to normal.







PROJECTS

- The current focus is to continue to price so we have more work in hand, we submitted \$400k worth of Variation Requests this Month.
- Kawakawa WTP Work is 99% completed, internal audit to be scheduled over in January. Updated PLC

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to be installed, this will not be completed until January 2021

- A program has been developed for the 2020-2021 schedule of work with a value of \$2,219,516.00, other work will be required to meet targets.
- Reaching out for work outside of the "Long term Plan" will be a priority to reach targets and to retain staff.

ASSETS

Planned Maintenance for the month of December was 100% for a total of 48 jobs.

The main generator at Paihia Ponds STP failed at the beginning of December. Parts are approximately 3 months away. The district portable generator was transported out and hooked up to enable the plant to continue running. This generator has experienced a major fault, so the second generator was installed. It is recommended that an independent assessment of the main generator is undertaken, and the installation fit for purpose.



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PUKETONA JUNCTION INTERSECTION IMPROVEMENTS – CONSTRUCTION UPDATES



UPDATE – 4 DECEMBER

Our first section of asphalt is now on the road surface at the Puketona roundabout site and we're gearing up for application of the next structural layer. See details below regarding upcoming night works and the roundabout operating.

Wednesday 9 and Thursday 10 December

Asphalt work will be undertaken at night. During these night works there will be some work on the tie-ins (connections) between the existing and new roads, which will involve single-lane stop/go traffic control under a 30km temporary speed limit.

Sunday 13 December

Asphalt work will be undertaken at night, between the bridge on SH10 and the roundabout. Please note, there will be no allowance for over dimension loads during this night works and an alternative route will need to be found.

Monday 14 and Tuesday 15 December

Road sealing will be undertaken at night, on the connection between the bridge on SH10 and the roundabout. This will involve either:

· single-lane stop/go traffic control under a 30km temporary speed limit

Or

a detour for all traffic (due to the narrow width at the bridge)

We will advise of traffic management for these nights once safest plans are determined next week.

At the completion of these works the roundabout will be opened to traffic. Because we will continue to work around the new roundabout until early 2021, a 50km temporary speed limit will remain in place. Manual traffic control will still continue through the first part of the new year as we complete works around the intersection.

The week commencing Monday 7 December, the new streetlight in the centre of the roundabout will be installed and lit up at night.

UPDATE - 10 DECEMBER

A change to our asphalt program means there will be no night works Wednesday and Thursday this week. The night works schedule will roll out as follows:

Sunday 13/12 – Wednesday 16/12 (inclusive)

- Night works for asphalt and building/surfacing the bridge tie in.
- A detour will be in place for all traffic via Te Ahu Ahu Road and SH1 from Monday 14/12 Wednesday 16/12, between 8pm 6am, due to the narrow width at the bridge.
- The evening of Thursday 17/12 will remain a contingency night in case of bad weather or otherwise.

On Tuesday 15/12 and Wednesday 16/12, the road surface at the bridge connection will be metal as we prepare it for sealing.

Early next week we will update you on progress. If you have any questions regarding the upcoming activities please get in touch.

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UPDATE – 19 DECEMBER

The crew at Puketona have been working hard over the last few weeks to reach the big milestone of an operating roundabout for Christmas.

After today's successful concrete pour we can confirm that this will occur under night works this Monday, 21 December. Details below.

Monday 21 December

From 7pm, manual traffic control and a 30km temporary speed limit will be in place. In order to line mark the connection between the old and new roads, traffic will be stopped at all three entry points:

- SH11 to/from Paihia
- SH10 northbound
- SH10 southbound

This stoppage will be approximately 10 minutes at each entry point to allow work to be completed and cones and barriers shifted. When traffic is released, all directions will then travel onto the new road and use the roundabout. Once traffic is using the new road, we will focus on creating entranceways for Junction Café and BOI Country Lodge. This work will be done away from traffic.

Work at Puketona Junction will continue until midday on Wednesday 23 December, we will then take a break until midday Tuesday 5 January.

Thank you for your patience and understanding during our construction this year, and please drive with care this holiday season.

See you in 2021.

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KAWAKAWA INTERSECTION IMPROVEMENTS – CONSTRUCTION UPDATES



UPDATE – 4 DECEMBER

Kerb installation has taken place at the intersection this week, under manual traffic control. The volume of traffic on the state highway and travelling through Kawakawa has increased significantly in the last few weeks, this had quite an effect on the queues yesterday and we acknowledge the impact this had on everyone. We are reviewing the upcoming day works over the next two weeks and how we will manage the traffic and safety of the site while we have crew on the roadside. We are looking at all potential alternatives to try and avoid this level of congestion. Summer holiday traffic appears to be on our doorstep already and this makes managing the traffic at the intersection far more intricate.

Coming up before Christmas holidays, we have the following activities planned.

Sunday 6 / Monday 7 / Tuesday 8 / Wednesday 9 / Thursday 10 December - night

Night works to complete the next layer of asphalt. One lane, stop/go, manual traffic control will be in place from 7.00pm, with a 30km temporary speed limit. After this layer is finished the ride through the intersection will be much smoother, however this is not the final layer and further asphalt will be applied to the road surface in the new year. During these nights we will also be carrying out drainage works and streetlight installation, which will remove the need to do these under manual traffic control during the day.

Monday 7 to Friday 11 December - day

Drainage works (installing culverts and manholes) to connect to the previously installed drainage lines, as well as some large outlet structures to the eastern side of the intersection. We will also tackle some enabling works for the street light installation.

There are 14 new street lights around the intersection, which will provide improved safety and visibility at night. These will be lit up within a week of being installed.

Work continues on the retaining wall and building the new, wide footpaths from the corner of SH1 up towards Queen Street. Concrete for the footpaths will be poured in the week beginning Monday 14 December, ready for the holiday period.

When we close up site for Christmas, we will move our security fencing to allow the car park and memorial to be open for the community and visitors to Northland. When we return in the new year (Tuesday 5 January) we will review how much of the car park is required for the remaining works and if we can reduce our occupation in that area.

UPDATE - 11 DECEMBER

In order to complete our pre-Christmas work away from day-time traffic, we will be conducting a final lot of night works next week.

Monday 14 - Wednesday 16 December

Night works to complete street light installation and concrete pouring for kerbs and traffic islands will take place between 12:00am midnight and 7:30am. Manual traffic control and a 30km temporary speed limit will be in place.

Under normal circumstances, night works would be off the road by 6:00am for peak hour traffic. Because of supply hours for our concrete, we need to extend this to 7:30am next week. We will be monitoring traffic queues closely between 6am and 7:30am so we can respond quickly to any excessive congestion. Thank you for your understanding while we deal with the technicalities of this work during a heavy traffic period.

You can view a time lapse video of the Kawakawa intersection on the Waka Kotahi Northland Facebook page: <u>https://www.facebook.com/nztanorthland/videos/426886774999750</u>

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UPDATE – 16 DECEMBER

Tuesday and Wednesday's night works have been rescheduled. They will take place Thursday night (17 Dec) and Sunday night (20 Dec), between 10pm and 7.30am. These will be the last night works for 2020.

By 12 midday on Wednesday 23 December the site will be packed up for the holidays, until midday Tuesday 5 January 2021.

We wish you all a safe, happy and peaceful holiday season.

UPDATE - 21 DECEMBER

Due to weekend supply issues Sunday's night works will now take place tonight - Monday 21 December.

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6 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:

to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
6.1 - Alternative Wastewater Treatment Technologies Review - Moxiepel	s48(2)(a)(i) - 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(2)(a)(i) - the exclusion of the public from the part of the meeting is necessary to enable the local authority to deliberate in private on its decision or recommendation
6.2 - Confirmation of Previous Minutes - Public Excluded	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

7 KARAKIA WHAKAMUTUNGA – CLOSING PRAYER

8 MEETING CLOSE