

**BEFORE THE KAIPARA DISTRICT COUNCIL PC78 HEARING PANEL**

**UNDER**

The Resource Management Act 1991

**IN THE MATTER OF**

Private Plan Change 78 (PC78) to the  
Operative Kaipara District Plan

---

**STATEMENT BY JAMES ALEXANDER SEPHTON IN RESPONSE TO DIRECTIONS  
FROM THE HEARING PANEL – INFORMATION REQUESTED FROM COUNCIL  
OFFICERS IN RELATION TO WASTEWATER AND WATER SUPPLY  
INFRASTRUCTURE PLANNING AND FUNDING DECISIONS**

**ON BEHALF OF KAIPARA DISTRICT COUNCIL**

**16 DECEMBER 2020**

---

## **Attachments**

Attachment 1 – Statement of Qualifications and Experience

Attachment 2 – WSP Summary Letter – Mangawhai CWWTP 7 December 2020

Attachment 3 – Water Storage Options – Council Briefing 11 November 2020

Attachment 4 – Council Briefing Minutes 11 November 2020

<b>Abbreviations Used in this Statement</b>	
CWWTP	Mangawhai Community Wastewater Treatment Plant
IS 2018/2048	Infrastructure Strategy 2018/2048
IS 2021/2051	Infrastructure Strategy 2021/2051
KDC	Kaipara District Council
LTP	Long Term Plan
LTP 2018/2028	Long Term Plan 2018/2028
LTP 2021/2031	Long Term Plan 2021/2031
NPS:UD	National Policy Statement: Urban Development
PC78	Private Plan Change 78

## 1. EXECUTIVE SUMMARY

- 1.1 This statement has been prepared by James Alexander Sephton on behalf of Kaipara District Council ("**KDC**") in response to the Hearing Panel's directions dated 27 November 2020 for Private Plan Change ("**PC78**") requiring KDC officers to prepare a written report answering specific questions (set out in the directions) in relation to infrastructure planning and funding for wastewater and water supply in Mangawhai (**directions**).
- 1.2 For wastewater, the responses in summary are:
- (a) The Mangawhai Community Wastewater Treatment Plant ("**CWWTP**") currently has 2411 connections with the immediate capacity for a total of 2800 connections, meaning there is currently capacity for an additional 389 connections.
  - (b) An upgrade to the CWWTP is required in circa 2026 – 2029 (as signalled in the WSP report). Associated investment was allowed for in the current Long-Term Plan 2018/2028 ("**LTP 2018/2028**") and is being reviewed as part of the development of the Long Term Plan 2021/2031 ("**LTP 2021/2031**"). Investment confirmed in the LTP 2018/2028 was expected to allow the number of connections to increase from 2800 to a total of 4300. The LTP 2021/2031 will be more closely aligned with the Mangawhai Spatial Plan which identifies the need for 6000 connections. Over the ten year period (2021-2031) covered by the LTP it is likely that investment will focus on achieving 5000 connections.
  - (c) Connections to the CWWTP are provided on a first come first served basis and there is planned capacity available for the Mangawhai Estuary Estates as well as PC78, if approved. The rate of growth and take up is monitored as building consents are lodged and where necessary, work is brought forward to align capacity with growth.
  - (d) Increases in capacity are aligned with actual demand to avoid over investment in the system. There have been no applications for residential building consent within the current plan change area and as PC78 has not been approved, the timing of capacity improvements has not been altered from the LTP 2018/2028. The implication of PC78 is that any additional demand for connections may cause the upgrade to be required sooner

(e.g. by 2026 rather than 2028, both dates of which are forecast by WSP). It is anticipated that this will be addressed in the LTP 2021/2031.

- (e) KDC have committed funding in its current LTP 2018/2028 and Infrastructure Strategy 2018/2048 (“**IS 2018/2048**”) for the upgrading of the CWWTP. This is primarily funded through development contributions, which are collected at the time of development with a targeted development contribution for wastewater in Mangawhai.
- (f) KDC are currently reviewing the LTP 2021/2031 and Infrastructure Strategy (“**IS 2021/2051**”). The IS 2021/2051 will consider the ultimate scenario for Mangawhai as set out in the Mangawhai Spatial Plan (adopted by Council on 16<sup>th</sup> December 2020) which is anticipated to require 6000 connections to the CWWTP (almost three times the current number of connections) by 2043. Growth projects will continue to primarily funded through Development Contributions
- (g) The construction of a Balancing Tank in 2021 has been approved by Council which will allow for peak flows in the summer to be accommodated. This has been designed so that it can be upgraded to a Cycle Activated Sludge System (CASS) tank in the longer term when required which will provide further increases in capacity.
- (h) KDC have commissioned modelling work which will inform the development of a more detailed ‘Road Map’ for the Wastewater System and clarify the timing and costs associated with further improvements including the replacement of sand filters and development of options to reuse water in the local area. It is anticipated that these recommendations will be accommodated in the 2024/2034 version of the Long Term Plan.

1.3 For water supply, the responses in summary are:

- (a) KDC staff have presented water supply options for Mangawhai to Councillors at a briefing on 11 November 2020, however currently there are no plans for KDC to fund or construct a reticulated water supply for Mangawhai.
- (b) Any reticulation for the proposed development in PC78 would need to be funded and constructed by the developer to service development within the subject site. It is possible that the system would be vested in KDC. Any such system would need to be designed and constructed so that it could

be operated to provide water that meets the standards set out in the Drinking-water Standards for New Zealand 2005 (revised 2018), as well as, in due course, any further requirements imposed by Taumata Arowai, the newly formed regulator for water suppliers.

- (c) Officers have been directed to investigate opportunities which will result in a reticulated water supply for parts of Mangawhai, however no funding has been specifically committed to securing potable water supply to service the Mangawhai community in the current LTP 2018/2028, IS 2018/2048 or any other adopted Council documents.

## 2. INTRODUCTION

- 2.1 My full name is James Alexander Sephton. I am a Chartered Civil Engineer and currently hold the position of General Manager in the Infrastructure Services department at KDC. A statement of my qualifications and experience is included in **Attachment 1**.
- 2.2 On behalf of KDC, I have been directed to respond to the Hearing Panel's<sup>1</sup> directions.
- 2.3 The purpose of this statement is to provide a factual response to the matters outlined in the directions in relation to wastewater and water supply infrastructure planning and funding decisions for Mangawhai as they relate to PC78. This statement does not provide any assessment or my opinion on these matters, just the facts in response to the questions asked by the Hearing Panel.
- 2.4 The matters to be reported on in the directions<sup>2</sup> are as follows:

- (a) *Wastewater for the Mangawhai area:*

- (i) *What is the infrastructure planning being undertaken for wastewater disposal given the issues raised in the PC 78 hearing about whether or not there is disposal capacity or potential capacity in the existing scheme, or an alternative scheme, to accommodate further development within Mangawhai, including the additional*

---

<sup>1</sup> See Hearing Directions dated 27 November 2020

<sup>2</sup> Ibid

*capacity that would be enabled should PC 78 be approved as notified?*

*(ii) In relation to the above bullet point, what are the funding decisions that have been made or are being contemplated by the Council in relation to the provision wastewater treatment/disposal (i.e. what has been committed and what is contemplated in the Council's Long Term Plan (LTP) or the next review of the LTP.*

*(iii) We request this information be provided in relation to a 30 year time horizon, given this is the 'long term' as defined in the NPSUD.*

*(b) Water supply for the Mangawhai area:*

*(i) What is the infrastructure planning being undertaken for water supply/water security given the issues raised in the PC 78 hearing about whether or not there is sufficient water supply/water security to provide for the development within Mangawhai, including the additional capacity that would be enabled should PC 78 be approved as notified?*

*(ii) In relation to the above bullet point, what are the funding decisions that have been made or are being contemplated by the Council in relation to securing a potable water supply to service the Mangawhai community, (ie what has been committed and what is contemplated in the Council's Long Term Plan (LTP) or the next review of the LTP).*

*(iii) We request this information be provided in relation to a 30 year time horizon, given this is the 'long term' as defined in the NPSUD.*

2.5 These matters are addressed below with reference to specific points listed above. I also provide brief comment on paragraph 7 and 8 of the directions which relate to the introduction of the new road connection to Old Waipu Road.

### **3. WASTEWATER FOR THE MANGAWHAI AREA**

#### **(a)(i) Infrastructure Planning for Wastewater**

- 3.1 KDC staff are currently in the process of conducting its three-yearly review to prepare the LTP 2021/2031. The document is currently being drafted by Council staff and it is anticipated that a Consultation Document will be adopted for public consultation in March 2021, with formal adoption of the LTP 2021/2031 occurring sometime in mid 2021.
- 3.2 While a number of briefings with Councillors have occurred, the LTP 2021/2031 is currently in draft format at the time of preparing this statement. Therefore, no details can be currently provided for the Hearing Panel to review as the document has not been adopted by Councillors to be released for consultation. This may change prior to the reconvened hearing date<sup>3</sup> or prior to a decision on PC78 being released. At that time, KDC staff would be able to provide an update as to the funding in the LTP for wastewater, should this be required by the Hearings Panel.
- 3.3 Council are also currently reviewing the *30 year Infrastructure Strategy* as part of the LTP 2021/2031. At the time of drafting this report, the IS 2021/2051 is scheduled to be taken to the next Council meeting at the end of February 2021. Similar to the LTP 2021/2031, the document is in draft format and still subject to change, and therefore no details can be currently provided. Again, this may change prior to the reconvened hearing date or prior to a decision on PC78 and KDC staff will be able to provide an update, as required.
- 3.4 At the time of preparing this statement, the latest available figures show that the CWWTP currently has 2411 connections with the immediate capacity for a total of 2800 connections. This means that there is currently capacity for an additional 389 connections.
- 3.5 Prior to the hearing, KDC made publicly available the Mangawhai Community Wastewater Treatment Plant: Future Options Development Report, prepared by WSP dated 28 November 2019. This report provides the most recent analysis of the capacity of the CWWTP and outlines the key upgrades required to the Mangawhai wastewater network and CWWTP to accommodate population growth in Mangawhai.

---

<sup>3</sup> At the time of preparing this statement, it is understood that the hearing is scheduled for early February 2021.

3.6 Following the adjournment of the PC78 hearing and the issuing of the directions from the Hearing's Panel, WSP were asked to prepare a concise summary of their November 2019 report. This is included as **Attachment 2**. The following paraphrases the key points of this statement:

- (a) WSP used population projections from the Draft Mangawhai Spatial Plan which projects 6000 connections to the CWWTP (almost three times the current number of connections) by 2043.
- (b) WSP estimates growth of between 70-100 connections per year. In 2019, there were 77 connections.
- (c) Based on growth of 70 connections per year, WSP predict that the CWWTP will require an upgrade by 2029 and the irrigation field would reach capacity by 2032. Should 100 connections per year occur, WSP estimate that the upgrade of the CWWTP would be required by 2026 and the irrigation field would reach capacity by 2028.
- (d) To mitigate the risk of discharge of untreated sewage in severe storm events, KDC have bought forward building of a Balance holding Tank which will enable storage of an additional 900m<sup>3</sup> of sewage, that can then be treated after the storm event. It is anticipated that the construction of this tank will be completed in 2021.
- (e) In collaboration with KDC and Ventia (maintenance operator), WSP has created a roadmap and poster that was presented to the community by the Mayor on 2 July 2020. This concisely outlines the process by which and when the proposed upgrades to the CWWTP will be consented, designed and constructed prior to the anticipated existing capacity limit being reached. This is based on growth triggers and is not a hard timeline for when the upgrade will occur.

3.7 Connections to the CWWTP are provided on a first come first served availability for development basis. The KDC Infrastructure Department bases its responses to growth and demand at the CWWTP on growth projections utilised by Council, including those referenced in the Draft Mangawhai Spatial Plan and the most recent report from Infometrics.<sup>4</sup>

---

<sup>4</sup> See Addendum to s42A report dated 18 November 2020 for copies of these population projections.



- 3.8 There is currently planned capacity available for the Mangawhai Estuary Estates and if approved, PC78. The rate of growth and take up is monitored as building consents are lodged and where necessary, work brought forward to align capacity with growth. Increases in capacity are aligned with actual demand to avoid over investment in the system. There have been no applications for residential building consent within the current plan change area and as PC78 has not been approved, the timing of capacity improvements has not been altered from the LTP 2018/2028.
- 3.9 Technical reviews by Mr James Dufty on behalf of Mangawhai Central Limited and Mr Steve Rankin on behalf of KDC, have confirmed that there is additional capacity within the CWWTP and that there is the ability to upgrade the facility in the future. The WSP report and summary outline that infrastructure planning for future upgrades is already in motion, irrespective of the outcome of PC78. The implication of PC78 is that any additional demand for connections may cause the upgrade to be required sooner (e.g. by 2026 rather than 2028, both dates which are forecast by WSP). However, ultimately the timing of any development is unclear and (even assuming PC78 is confirmed), would depend on the developer. It is anticipated that this will be further addressed in the LTP 2021/2031.

**(a)(ii) Infrastructure Funding for Wastewater**

- 3.10 Funding decisions which have been made by Council are documented in the 2018 LTP, Infrastructure Strategy and Development Contribution Policy. Decisions include
- (a) the allocation of \$20.05 million in the 2018/2028 LTP over the 10 years to 2028 for the upgrade and extension of the scheme to accommodate new connections.<sup>5</sup>
  - (b) the establishment of a Development Contributions Policy which requires funding from developers for both the existing scheme (Surplus Projects) .<sup>6</sup>
- 3.11 KDC's current policy for development contributions was adopted in 2018. Development contributions are sought to meet the growth-related component of capital expenditure in selected areas for roading, wastewater treatment, water supply and stormwater management. For wastewater treatment in Mangawhai, the

---

<sup>5</sup> See page 11 of the LTP 2018/2028 – Part One <https://www.kaipara.govt.nz/uploads/ltp2018-2028/LTP%202018-2028%20Pt%201%20Final.pdf>

<sup>6</sup> KDC Development Contribution Policy Adopted

development contribution payable is \$22,113 per unit of demand.<sup>7</sup> As highlighted in the LTP 2018/2028 and IS 2018/2048, development contributions are identified as the key mechanism for funding future upgrades to the CWWTP.

- 3.12 2020 / 2021 is the third year of the current LTP 2018/2028. KDC's most recent Annual Plan took effect from 1 July 2020. In terms of Mangawhai Wastewater Development, the Annual Plan has allocated \$650,000 for upgrades to the Wastewater Treatment Plant and a further \$1,650,000 for extending reticulation, both funded through development contributions and loans (with loans being used to cover the "shortfall", until sufficient development contributions are collected).
- 3.13 Council has recently approved the progression of the Balancing Tank project which is also funded through development contributions and loans.
- 3.14 Pending decisions include the level of funding to align with growth and associated development contributions. These will be established in the LTP 2021/2031, IS 2021/2051 and updated Development Contribution Policy.
- 3.15 The preferred option to support growth (outlined in the WSP report) will be included in the LTP 2021/2031 and IS 2021/2051 and will be subject to consultation as part of the Long Term Plan process.
- 3.16 Council will also approve the Development Contributions Policy as part of the LTP 2021/2031 process. A paper, "Changes proposed to Development Contributions Policy for inclusion in draft Long Term Plan 21-31" was presented to Elected Members on the 9<sup>th</sup> December and this signalled a continuation of funding identified growth projects through Development Contributions.

---

<sup>7</sup> See page 11 of adopted Development Contributions Policy 2018  
<https://www.kaipara.govt.nz/uploads/documents/d/Development%20Contributions%20Policy%20Adopted%202018.pdf>

#### **4. WATER SUPPLY FOR THE MANGAWHAI AREA**

##### **(b)(i) Infrastructure Planning for Water Supply**

- 4.1 KDC's most recent position on infrastructure funding for water supply was confirmed at the Council Briefing dated 11 November 2020. An item titled "Water Storage Options" (see **Attachment 3**) was taken to this briefing which sought direction from the Councillors with regards to water security across the District for the LTP 2021/2031. This included discussion on water supply options for Mangawhai and the following statement:

*"We are seeking direction to continue investigating these options as they arise with a view to introducing through development agreements and/or a variation to the 2024 LTP security of water supply for Mangawhai with a view to mitigating future issues."*

- 4.2 Minutes from the meeting are included in **Attachment 4**. These highlight that water supply in Mangawhai is not to be included within the LTP 2021/2031 at this stage.

- (a) At this time, there are no plans for Council to fund or construct a reticulated water supply for Mangawhai. Any reticulation for the proposed development in PC78 would need to be funded and constructed by the developer to service development within the subject site.
- (b) It is possible that, once constructed, the system would be vested in KDC. Any such system would need to be designed and constructed in order to provide water that meets the standards set out in the Drinking-water Standards for New Zealand 2005 (revised 2018), as well as, in due course, any further requirements imposed by Taumata Arowai, the newly formed regulator for water suppliers.

##### **(b)(ii) Funding Decisions for Water Supply**

- 4.3 Council officers have been directed to investigate any opportunities which will result in a reticulated water supply for parts of Mangawhai however no funding has been specifically committed to securing potable water supply to service the Mangawhai community in the current LTP 2018/2028, IS 2018/2048 or any other adopted Council documents. As for wastewater, reference to the LTP 2021/2031 and IS 2021/2051 cannot be made due to the draft status of these documents and because they have not been confirmed for notification or release from Council yet.

## **5. CONNECTION TO OLD WAIPU ROAD**

5.1 KDC Counsel Warren Bangma will address the legal scope of introducing a new road connection to Old Waipu Road and providing a reticulated water supply in his supplementary legal submissions. In case it is of interest to the Panel, I note that, in relation to the connection to Old Waipu Road:

- (a) A connection between Molesworth Drive and Cove Road was first signalled in the Mangawhai Community Plan. It has subsequently been incorporated within the Mangawhai Spatial Plan which has been adopted by Council on 16 December 2020.
- (b) Through discussions with the New Zealand Transport Agency, the connection between Molesworth Drive and Cove Road has also been incorporated within the Draft Network Operating Framework for Mangawhai which is expected to be endorsed by KDC in March 2021.
- (c) The provision of a connection to the Old Waipu Road is consistent with longer term plans to connect to Cove Road.



James Alexander Sephton

16 December 2020

## **ATTACHMENT 1 – Statement of Qualifications & Experience**

James Alexander Sephton is a Chartered Engineer with over 25 years experience in the planning, development and delivery of Infrastructure projects. He has a Bachelor of Engineering degree (with Honours) from Newcastle University in the UK.

Prior to joining Kaipara District Council as the General Manager for Infrastructure Services, he was a Principal Project Manager for five years at the New Zealand Transport Agency responsible for the development and delivery of projects in Te Tai Tokerau.

**ATTACHMENT 2 – WSP Summary Letter – Mangawhai CWWTP 7 December 2020**



7 December 2020

Matthew Smith  
Kaipara District Council  
Private Bag 1001  
Dargaville, 0340

## **Mangawhai CWWTP - Request for information**

1-14129.15

Dear Matthew,

This letter follows KDC request to provide a concise and short summary of the report Mangawhai Community Wastewater Treatment Plant: Future Options Development, (WSP, 2019-11-28). The report outlines the key changes required in the Mangawhai Wastewater network and Community Wastewater Treatment Plant (CWWTP) and disposal to accommodate changes in population.

Included in this information is the basis for population growth used in the WSP forecasts in 2019 that were used as a basis for timelines and future plant sizing.

A route map is given below that outlines many of the key stages required to get a full understanding of the needs of the system and several key areas are being undertaken now to enable informed discussion with the community.

### **Growth**

Spatial Plan population forecast (2019 from KDC) projection to reach 6000 connections by 2043, three times the existing population. Some of this growth will be commercial and light industrial units, with the majority being domestic housing.

WSP estimates in 2019 were based on 2000 connections in 2019, increasing by 70 -100 connections per year. This was deemed appropriate at the time of writing the options study as this matched growth rates from 2017 to 2019 provided by KDC to WSP. Growth in 2019 was 77 new connections.

WSP estimated that based on a growth rate forecast of 70 connections per year an upgrade of the CWWTP will be required by 2029. However, should 100 connections per year occur, this will require acceleration of the upgrade to 2026.

WSP estimated that the irrigation field will reach capacity in 2032 at 70 connections per year, and 2028 at 100 connections per year.

The limitations in the current system are described below.

### **Treatment Capacity.**

The current CWWTP was commissioned in 2009 and consists of an inlet screen to remove inorganic debris, 2 activated sludge reactors for organic and nutrient removal, a flow balance tank, sand filtration and tertiary disinfection before transfer 12 km to Browns Road irrigation

site for disposal to land. Sludge is dewatered on site and currently disposed to landfill in Whangarei.

In 2019 the aeration systems were upgraded to increase treatment capacity (load) up to 2800 connections.

A plant upgrade to provide more biological treatment capacity is expected to be required before summer of 2028 (at additional 70 connections per year)

### **Hydraulic Capacity**

There are currently 65.5 ha of land under irrigation. This is considered to be sufficient land available to dispose of all effluent up to 2032 (at 70 connections) or 2028 (at 100 connections per year). WPS estimated that at an additional 90-100 ha of irrigation land may be required at average flows for 7000 connections. Owing to limitations on land application, this could require purchase of 150 ha of additional land.

Finally, additional rising mains from the CWWTP will be required and storage on site to buffer wet weather when land application is not possible.

The CASS reactors, effluent balancing, sand filters and transfer main have a hydraulic limitation of 70 l/s maximum flow and need upgrade before higher flow can be passed through the treatment plant.

Due to the nature of the catchment being associated with roof tanks, this flow rate is rarely reached for sustained periods with a typical flow in dry weather being only 600m<sup>3</sup>/d or 7 l/s (with 1200 m<sup>3</sup>/d peak holiday season). However, as has been seen on several occasions in recent years, heavy storms and cyclone events can result in additional flow into the network with at least 70 l/s arriving at Outfall Pump Station for prolonged periods and being passed to the CWWTP. As the catchment grows and more wastewater and storm water enter the system, there may be an increase in storm related high flows. To mitigate the risk of discharge of untreated sewage in a storm event the Balance Tank (planned for build in 2021 and located at the WWTP) will enable storage of additional 900 m<sup>3</sup> of sewage, that can then be treated after the storm event. The tank is sized and designed so that at the 2028 upgrade it can be repurposed to a treatment reactor as part of a flow and load upgrade.

### **Future Road Map**

A roadmap was prepared in 2020 in collaboration between WSP, KDC and Ventia (maintenance operator) as per Figure 1 below. This was publicly presented to the community by the Mayor on the 2 July 2020 at the Mangawhai WWTP (as per Figure 2 below)



## Mangawhai CWWTP Roadmap

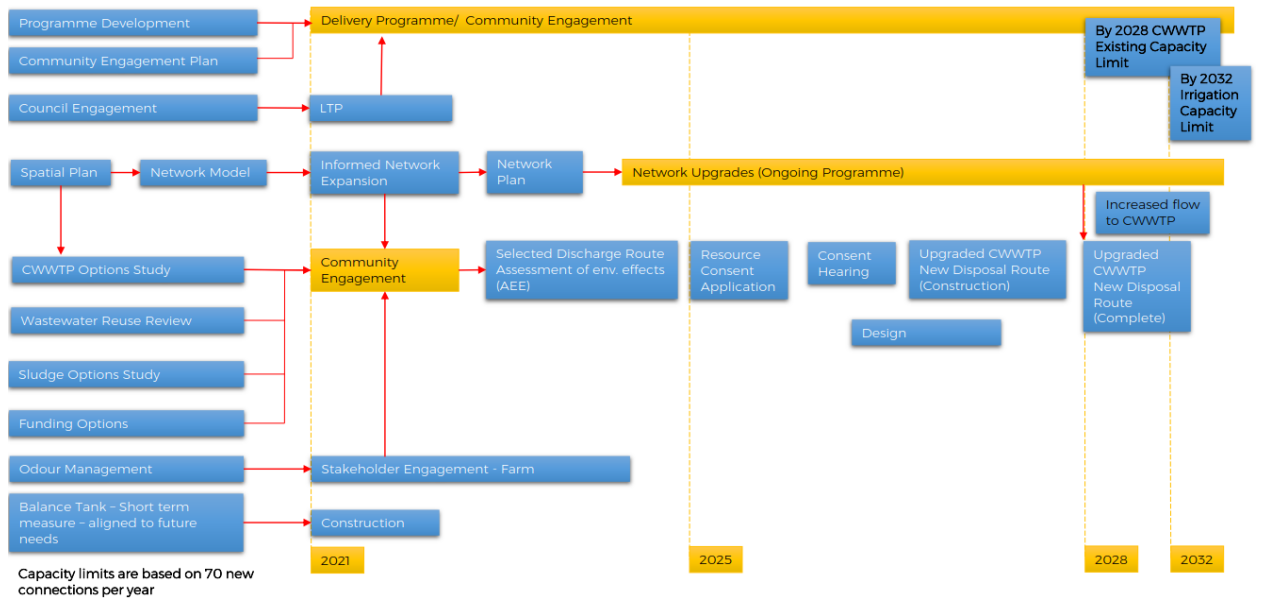


Figure 1 - Mangawhai CWWTP Roadmap



Figure 2 - Poster presentation (also on KDC website)

The scheme will require phased upgrades of wastewater network pump stations, mains and gravity sewers as new properties are developed and infill housing occurs. This will influence

the flow to be treated, which then influences the disposal route for treated high quality effluent.

The choice of disposal route will influence the standard of treatment required and the scope of the CWWTP upgrades. Community engagement with township and Iwi is seen as essential on this journey as the views will be considered and discussions on affordability and funding must be held.

Additional considerations are being given to the long term water supply requirements of the catchment. Currently the town is on roof tank supply, so consumption per capita is very low, but should potable water be available as a municipal supply, there will be an impact on the future flow received at the WWTP.

### **Progress**

The Mangawhai Scheme Roadmap has been developed and shared with Council members.

Building of the wastewater network model is currently underway by WSP, with data collection for calibration to start in January 2021. A costed network strategy will then be developed.

Wastewater reuse options investigation, including reuse of water by the Mangawhai Golf Course, are currently under considerations including opportunities for treated effluent reuse to irrigation, gardens, recreational areas, or a domestic "purple pipe" system for households. A successful reuse scheme will substantially reduce the infrastructure needed and the impact on the environment from effluent disposal.

The additional balance tank is currently being designed with a 2021 build planned.

If you require any additional information, please contact me at [andrew.springer@Wsp.com](mailto:andrew.springer@Wsp.com)

Regards



Andrew Springer  
Technical Principal Wastewater Treatment Engineer



# Water Storage Options

**Meeting:** Council Briefing  
**Date of meeting:** 11 November 2020  
**Reporting officer:** Matthew Smith, Manager Infrastructure Planning

## Purpose/Ngā whāinga

The purpose of this paper is to seek Council direction in this LTP with regards water security across the District. Specific questions which will be discussed at the briefing are:

- Is there a compelling need for increased water storage?
- Is the benefit District Wide or just in Dargaville/Mangawhai?
- Will Council (subject to community feedback) invest in water security projects in Dargaville and /or Mangawhai?
- How do we expect users to pay for this service?
- Should the cost be allocated to just the targeted area or shared?

## Context

### **Kaipara has limited resilience in its existing Water Supply**

The population of Kaipara has been well served by the water sources – rain water, rivers and bores – for many years. Our main centres which are served by a community system are reliant on rivers and streams which, for most parts of the year, are not constrained.

- Dargaville – River/Streams
- Maungaturoto – River and a private dam
- Mangawhai – Majority private tank and a very small council ground water
- Ruawai – Groundwater

A large proportion of District are reliant on water tanks and during drought require tank fillers

### **The changing environment (meteorological and political) is putting more pressure on our ability to provide water in summer**

- The security of water supply for many of our townships is becoming an increasingly serious topic for consideration, NIWA is predicting that the climate in Northland (including Kaipara) is going to get slightly hotter, but with longer dryer periods, interspersed with periods of increasingly significant rainfall.
- In response to the deterioration of our streams and rivers in New Zealand, Central Government has also produced documents like the National Policy Statement(NPS) Fresh Water and the corresponding National Environmental Standards(NES) of the same, Regional council has started to adopt these outcome based guidelines within the regional plan as required by Central Government, the outcome of these combined documents are already making the ability to draw water from streams and rivers in Northland more and more difficult.
- Kaipara District experiences drought conditions on a regular occurrence, which is reinforced through the monitoring of river/ground water levels by the Regional Authority (NRC) as per our consent conditions, KDC typically then restricts the volume of water it can supply to residents who are on water networks and also in rural areas; as water suppliers are unable to access as much water at such times. In the 2019/2020-year water was being delivered from Whangarei and Auckland to our residents on tank supply in certain areas, Dargaville maintained a supply but it was severely limited.

With the above information the following issues are starting to present themselves to KDC:

1. The NPS specifically states that *“First, the health and well-being of water bodies and freshwater ecosystems, Second, the health needs of people (such as drinking water), third, the ability of people and communities to provide for their social, economic and cultural well-being, now and into the future.” Part 2: Objective and policies, 2.1 Objective* This means that our ability to vary the current consents now or to apply for consents with better conditions to supply our communities in the face of drought is secondary to the health of the water body, and we are unable to cite economic hardship or the fact that our businesses or farms can't run as a reason for a consent to be granted,
2. When our streams and rivers are low and we are unable to take raw water from them for treatment, will be at the same stage that water tanks on properties are dry (as per drought conditions 2019/2020), and water tanks on properties are controlled by the building act, which only states that *“an adequate supply”* is catered for, there is no mention of drought or drought security.
3. Unless we have a significant water supply or storage facility, we will be unable to draw water from sources when they are flowing above their mean annual low flow and store it for use during drought conditions.

### **There are emerging opportunities to increase resilience**

The Tai Tokerau Water Storage Trust (TTWST) is constructing a large water reservoir within Kaipara utilising a loan from Central Government. This has created an opportunity for council to secure an alternative source of raw water.

In Mangawhai there are opportunities arising through developments that council would be able to take advantage of to secure a supply of water, the alternative option is through a connection to the Whangarei District Council water scheme if they have water available.

Maungaturoto, currently consumes water from a private dam which it purchases at a metered rate, there is an option to increase the capacity of this dam at councils cost to ensure resilience.

## **Discussion/Ngā kōrerorero**

### **There is an immediate need to decide if KDC wishes to utilise the water storage from TTWST.**

As TTWST are proceeding with the consent for construction of the dam along an advanced timeline, KDC need to decide if we are to enter negotiations for water, the infrastructure to support this will still need to be designed and accurately costed.

The recommended option from officers is that

- Council invests in infrastructure to connect from the dam to the existing reticulation in Dargaville
- Council becomes part of the trust (cost not known at this stage)
- Users will pay for water drawn from the dam (Option 2 – pay as use)

User pay options:

1. Purchase a specific amount of water within the dam for use by KDC in the Dargaville area, this is approximately \$2 million (still to be confirmed) this would currently secure a volume of 300,000 cu.m of water or roughly 3,000 cu.m of water per day for 100 days currently Dargaville under water shortage direction uses just under 3,200cu.m drawn from the Kaihu River at Rotu. KDC would still need to treat the water and supply it to town, this is proposed to be completed at the same time as the infrastructure is laid for the TTWST network as there would be savings on construction by utilising the same contractors digging one trench to contain both pipes. There would still be operational costs on top of this value, maintenance of the network, and infrastructure still owned by TTWST and as with any network the fewer people who are on it the higher the Opex costs, so there is a risk that in the early years the Opex costs will be higher,

2. Do not purchase water volume, but instead purchase water by volume as it is needed, these figure have not yet been delivered to us, but it may be as much as \$1.50/cu.m this will still include the same Opex costs as above, and the corresponding purchase value for that amount of water, but only for the water used. KDC would still need to treat the water and deliver it in the same manner as above.
3. Do not look to involve the council in any of the above options. Whilst the costs would be low KDC does not have any other option of securing water in our area, as drought frequencies increase we will be able to draw less water, and would be in constant conflict with the regional authority (or the new water reform body) to supply water to our townships, whilst our areas may be flooded with water (Kaihu) KDC would be unable to use or store this water for use in dryer conditions and it would all flow out to the Kaipara Harbour unused as it currently does, this raises three immediate options:
  - a. KDC invests in a water storage facility of its own, with no Government Support at the cost of rate payers (or targeted rate schemes), *highly unlikely as the costs would be significant, if council was able to get consent under the new NPS or NES to construct a dam over a stream in the future*
  - b. Force residents to construct extra storage facility on properties with a policy or bylaw, it would need to be significant (4 person household at 280l/p/d would use 1,120 litres of water a day (Mangawhai typically uses about 160l/p/d on average) this would mean that a four person household to cater for a 100 day drought (or whatever Council might dictate) would need to store about 100cu.m of water or 4x 25,000l tanks per property. I would predict that council in a similar manner to existing issues would be forced to step in and facilitate or purchase this storage at that stage. \$15,000 per tank x 4 x 500 households equals \$30,000,000 of investment.
  - c. KDC does nothing and relies on greater support from the new water body or Civil defence in emergency drought situations, alternatively we could look to Central Government for funds to construct water storage for our townships.

### **Options which could be explored in Mangawhai**

We are seeking direction to continue investigating these options as they arise with a view to introducing through development agreements and/or a variation to the 2024 LTP security of water supply for Mangawhai with a view to mitigating future issues.

### **Options to be explored in Maungaturoto**

We are seeking direction to continue discussions with the owners of the Private Dam to fully investigate the possibility and costs of increasing the volume of water to provide more resilience to Maungaturoto.

### **Next steps/E whaiake nei**

1. Council employees will engage with the TTWST to ascertain what the likely costs for the above options would be storage, operational, metered water purchase.
2. A report will be brought to council outlining the above options and the likely costs associated them,
3. The resolution of the above options will be presented in the Long-Term Plan budgets in the appropriate year to be managed by council operatives.

**ATTACHMENT 4 – Council Briefing Minutes 11 November 2020**

## **Kaipara District Council**

### **Long Term Plan Briefing Minutes**

**Date:** Wednesday 11 November 2020  
**Time:** 9:33 am – 3:52 pm  
**Location:** Lighthouse Function Centre  
32 Mount Wesley Coast Road  
Dargaville

**Members Present:** Mayor Jason Smith  
Deputy Mayor Anna Curnow  
Councillor Karen Joyce-Paki  
Councillor Victoria del la Varis-Woodcock  
Councillor Mark Vincent  
Councillor Peter Wethey  
Councillor David Wills (from 9.42 item 2)  
Councillor Eryn Wilson-Collins

**Apologies:** Councillor Jonathan Larsen

---

**Meeting started at 9:33 a.m.**

#### **1. Opening**

##### **1.1 Karakia**

Councillor Eryn Wilson-Collins opened the meeting with a karakia.

It was noted that the Mayor would leave the meeting from 10.45am to lay a wreath at the RSA for Armistice. The Deputy Mayor would take the Chair at that time. Members would hold a minute silence at 11.00am.

It was also noted that the agenda order had altered.

##### **1.2 Project update**

Michaela Borich (Strategic Planning Advisor) gave an update on the LTP 2021/2031 project.

Council discussed:

- Schedule and consultation dates
- Significant forecasting assumptions



Council Directed staff to:

- Check if the financial strategy is to go to Council via the Audit, Risk and Finance Committee, particularly the significant forecasting assumptions.

## **2. Financial Update – Part 1**

Paul Cresswell (Financial Planning Lead), Jim Sephton (General Manager Infrastructure Services) and Sue Davidson (General Manager Finance, by phone) presented part one of the financial update and answered questions from elected members.

Council discussed:

- Principles adopted in the update of the Draft LTP.
- Definition of funding sources as 'subsidised' implying any source of funding external to council.
- Inclusion of the Regional Development Council Controlled Organisation (CCO).
- Charging and communication of the new solid waste recycling initiative.
- Mitigation options regarding bins being used for other purposes.
- Dargaville Community Development Board (DCDB) request to target a rate on their behalf, to deliver CCTV to Dargaville and Ruawai.

Council directed staff to:

- Keep Table 1 Climate Change and the CCO as is.
- Inclusion of Climate Change to cover Auditor General baseline with options above that for the community to consider.
- Ensure consistent and clear messaging across Northland on these topics particularly around the cost rises in the longer term.
- Keep Solid Waste as is.
- Include the cost per week in the report, and for communications work to illustrate in a simple way, the savings from general waste when recycling.
- Include the DCDB request but make Council's role clear; that DCDB is an external party and Council is only administering. The community is to be asked in the LTP document if they agree with council's role as administrator.

**The Chair was passed to Deputy Mayor Curnow**

**Meeting adjourned for morning tea at 10:50 a.m.**

**A minute silence was observed at 11:00 a.m. for Armistice**

**Meeting reconvened at 11:02 a.m.**

## **3. Consultation dates, updates and pre-engagement feedback**

Ben Hope (Senior Communications Advisor) presented this item and answered questions from elected members.

Council discussed:

- Pre-engagement so far and the purpose of each step of the consultation process
- Waste in relation to climate change, and the three waters statistics presented.
- The value of the pre-engagement events for elected members to meet the community.

- Educational pieces occurring between now and March 2021.
- Staff confirmed that high level results of surveys (high level) will be circulated back to the community.
- There was confirmation of the stringent process the consultation document goes through with auditors including assumptions, ensuring it is clear and concise, the balancing between 'plain language' and appropriate language.

Council directed staff to:

- Proceed as presented

**The Chair returned to Mayor Smith at 11:25 a.m.**

#### **4. Financial Update – Part 2**

Paul Cresswell (Financial Planning Lead), Jim Sephton (General Manager Infrastructure Services) and Sue Davidson (General Manager Finance, by phone) presented part two of the financial update and answered questions from elected members.

Council discussed:

- Capital Growth Projects and the removal of some as discussed previously.
- The challenge of growth versus affordability and risk in the prioritisation process.
- The opportunity to revisit growth in the next LTP review in three years
- Development Contributions (DC) processes and policy
- Revised Rates increases from 2020-2021 Annual Plan
- Optional items not included in the rates
- Solid Waste
- Current pre-engagement events to clarifying complex points with the community

Council directed staff to:

- That the plan would show all growth projects with some in the prioritised list and others to be the enabler.
- Clearly communicate the solid waste impact on rates
- Rates invoices to clearly outline the council where the rates are attributed eg: Northland Regional Council versus Kaipara District Council, etc.
- Members expressed a degree of comfort with the current state of the financials understanding that it is the indicative foundations that will go through to the auditors, and that there is the equalisation process still to come.

**Meeting adjourned for lunch 12:18 p.m.**

**Meeting reconvened at 12:49 p.m.**

#### **5. Dargaville Civic Precinct Options Assessment**

John Burt (Property, Procurement and Commercial Manager), Gavin Flynn (AR & Associates Ltd, consultants) presented this item and answered questions from elected members.

Council discussed:

- Dargaville's important role as a civic centre for the Kauri Coast and the essential services required
- Future opportunities on government owned land
- A range of options for existing buildings and functions also considering the new ways of working
- Ensuring function of rooms enabled sharing facilities with other agencies and the community
- Requirements for a meeting room that can satisfy all functions of a Council Chamber
- The need for centrally located civic buildings for accessibility
- The proposed 2024 start time and the impact on current building remedial requirements
- 'Trust' models
- Capital costs versus demolition operational cost and depreciation assignment

Council directed staff to:

- Refine the level of detail in report based on today's discussions.
- Preference was to demolish the 1990's leaky addition at 37 Hokianga Rd with the necessary repairs/ reinstatement made to the two older buildings
- Council will consult with the Community about forming a trust to construct a new building adjacent to the War Memorial hall and Municipal building to house the Library and a community Hub. This facility will be multiuse and therefore also be suitable for holding Council meetings/ceremonies. Council contribution to this project will be in the order of \$2.8 million as well as providing the land
- Preference to demolish 42 Hokianga Road council building and convert land into green space and land bank it, once council staff had moved into new NRC building.
- Library conversation to continue to find interim solution
- Doing nothing is not an option. Present options for consultation with a 'preferred option' from council.
- Team to consider depreciation on those buildings to offset demolition.

**Meeting adjourned for afternoon tea at 2:12 p.m.**

**Meeting reconvened at 2:20 p.m.**

## **6. Water storage options**

Matthew Smith (Infrastructure Planning Manager), Jim Sephton (General Manager Infrastructure Services) presented this item and answered questions from elected members.

Council discussed:

- The need for a secure water supply.
- Storage as an option.

- The growing population and potential reduction of water take from rivers in future based on the National Policy Statement (NPS).
- The need to remove reliance on current supplies from Auckland or Whangarei in future.
- Desalination and wastewater treatment as an alternative to water storage. Cultural aspects and public perceptions with regard to wastewater treatment.
- The need to communicate water conservation.
- The Dargaville storage option and central government funding to make it viable.
- Future proofing the areas along the pipeline route of the pipeline and availability of water for other uses.
- \$2 million capital investment for the infrastructure of the treated water line into Dargaville and a small package treatment plant at Te Kopuru.
- Water rates in the LTP financials include the \$2m and indicative costings.
- Mangawhai not included in LTP at this stage.
- Maungaturoto repair to existing system and operational issues to work through this summer. Funding has been approved through three waters. To be looked at in next LTP with possibility of designating as 'water storage' to give the protection it needs.

Council directed staff to:

- Desalination and treated waste water to be explored for the latest technology as a future option.
- \$2 million to include in LTP for connection to Dargaville from Tai Tokerau Water Trust water storage facility, funded from debt.
- Proceed as presented.

## 7. Financial Update – Part 3

Paul Cresswell (Financial Planning Lead), Jim Sephton (General Manager Infrastructure Services) and Sue Davidson (General Manager Finance, by phone) presented part two of the financial update and answered questions from elected members.

Council discussed:

- Notes regarding the 'Summary Draft Statement of Revenue and Expense (Year 1)'
- Water rates and penalties are not included.
- Budgets are working to Council's direction of \$60m borrowing which is well within the direction of Treasury for borrowing.
- Growth work.
- Water supply and waste water targeted rate equalisation.
- The cost of the two systems, water and wastewater, and options for distribution of the cost.
- The 'benefit to all' principle, equalisation, and transition across three years to avoid sharp costs for communities.
- The equalisation model alignment with 'Three waters' work.

- Allocating a percentage of the rate to the general rate for the benefit of the whole, and the balance targeted.
- The general rate already takes 10% to storm water.
- Failing wastewaters schemes.

Council direction:

- Yes, council will support equalisations and amendments for smoothing, but both options to go out to the community.
- Support general rate wastewater around 5%.
- No, around potable water.

**Councillor Wilson Collins closed the meeting with a karakia.**

**Meeting closed at 3:52pm**