



Water Supply

Purpose

A reliable and high-quality water supply to Kaipara district's reticulated areas is essential for communities and local economic development.

Public water supplies ensure communities receive water at the cost of production. Our water supply activities also protect and enhance our natural assets and open spaces.

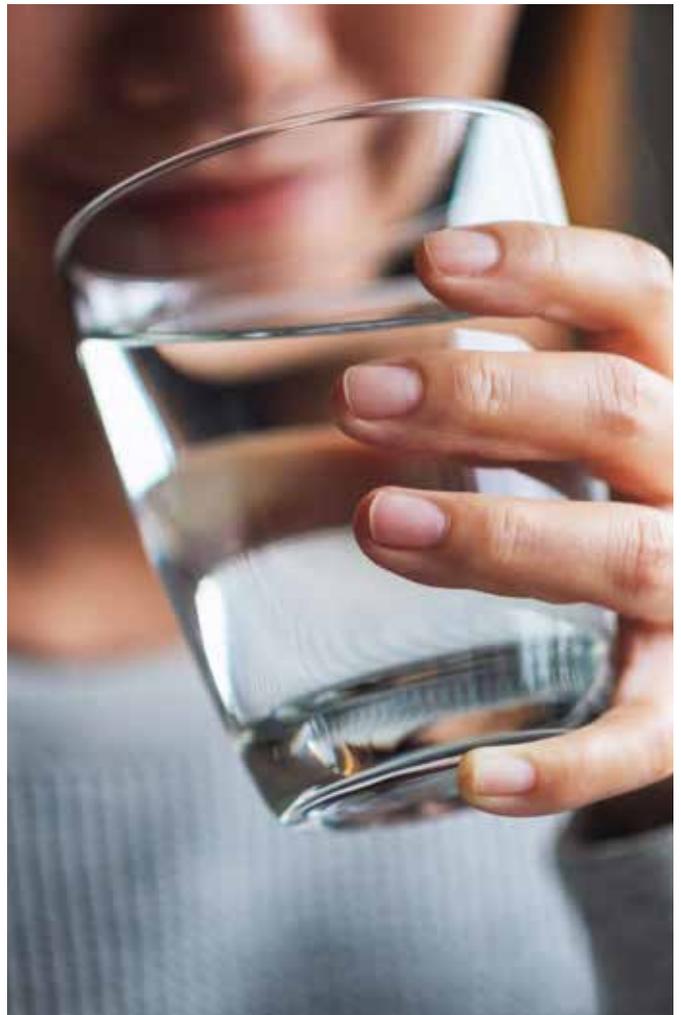
Legislation associated with this service

- Local Government Act 2002
- The Health (Drinking Water) Amendment Act 2007
- Resource Management Act 1991
- The Water Services Act 2021
- Water Services (Drinking Water Standards for New Zealand) Regulations 2022
- Drinking Water Quality Assurance Rules 2022
- Taumata Arowai – the Water Services Regulator Act 2020

Risks and issues

- Water supply security for Dargaville is challenging during dry years and results in water restrictions
- Supplying raw water to customers for farming and horticultural uses is a risk, and if incorrectly used as drinking water without appropriate treatment, it may result in public health issues
- Our treatment plants require safety and water quality upgrades as required

- The renewals programme is based on affordability and condition assessments. Our water supply assets are older schemes which are nearing the end of their effective lives and need renewal. Renewal costs will be high and must be done in a planned and affordable manner
- Asset condition knowledge (pipes) is mixed and we risk unforeseen asset failure, and
- Inadequate asset management information available to guide decision making.



What we do

We operate five community water supply schemes – Dargaville (including Baylys), Glinks Gully, Ruawai, Maungatūroto and Mangawhai (mostly supplying the Mangawhai Heads Holiday Park and the Wood Street commercial precinct) giving them a sustainable drinking water supply.

We own and maintain the whole water supply network for the five schemes. We source raw water and treat it to produce quality and quantities of drinking water to drinking water standards (potable); then distribute that treated water to the point of supply for customers while

meeting specific flow, pressure, and quality standards. This includes water for emergency firefighting services for Dargaville’s urban area.

We also undertake:

- customer services
- water billing
- asset management
- planning
- treatment plant operations and maintenance
- network operations and maintenance
- capital and refurbishment programme; and
- consent monitoring and compliance.

Contribution to community outcomes



Providing clean water supply to our communities

Consider water conservation and water security in future plans

How is climate resilience being considered?

Environmental impacts are considered in the planning of all infrastructure activities. Tools used include hydraulic models that allow for scenario planning to plan and test solution design outcomes.

Increasing drought conditions and lower mean flow levels for surface water could pose risks to water supply activities. While demand for potable water will remain and increase, access to surface water is likely to change and alternative sources may need to be found.

Drinking water standards have increased, as has the associated monitoring, sampling and reporting to ensure environmental standards and impacts are known and understood.

In our planning activities, we continue to seek options for water storage, water conservation and ensure those plans reflect conservation of supply as well as adapting to changes in access and availability.



What we will deliver, when

Description	2024/2025	2025/2026	2026/2027
Consent renewals for Mangawhai and Lake Taharoa			
Dargaville water main renewals (Logan Street)			
Dargaville – finalise water security of supply options			
District-wide reticulation network renewals			
Network models – demand management and firefighting capability			
Leak detection assessments – raw and treated water lines			
District-wide backflow prevention – assessment and install as required			

Performance measures	LTP Year 1 Target 2024/2025	LTP Year 2 Target 2025/2026	LTP Year 3 Target 2026/2027
The extent to which Council's drinking water supply complies with Drinking Water Quality Assurance Rules (DWQAR) (bacteria compliance criteria) - Mandatory.	All schemes must be compliant	All schemes must be compliant	All schemes must be compliant
The extent to which Council's drinking water supply complies with Drinking Water Quality Assurance Rules (DWQAR) (protozoal compliance criteria) - Mandatory.	All schemes must be compliant	All schemes must be compliant	All schemes must be compliant
The percentage of real water loss from our networked reticulation system (average for total network of all schemes). ¹	≤28%	≤27%	≤27%
Median response time for attendance for urgent callouts; from the time the local authority receives notification to the time that service personnel reach the site.	≤2 hours	≤2 hours	≤2 hours
Median response time for resolution of urgent callouts; from the time the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption.	≤48 hours	≤48 hours	≤48 hours
Median response time for attendance for non-urgent callouts; from the time the local authority receives notification to the time that service personnel reach the site.	≤3 hours	≤3 hours	≤3 hours
Median response time for resolution of non-urgent callouts; from the time the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption.	≤3 days	≤3 days	≤3 days

Performance measures	LTP Year 1 Target 2024/2025	LTP Year 2 Target 2025/2026	LTP Year 3 Target 2026/2027
Total number of complaints about drinking water quality e.g., clarity, odour, taste, pressure or flow and continuity of supply. Expressed per 1,000 water connections.	≤39	≤38	≤38
Total number of complaints received by Council about Council's response to any of these issues. Expressed per 1,000 water connections.	≤39	≤38	≤38
Water take consents:	100% compliance with Northland Regional Council consents	100% compliance with Northland Regional Council consents	100% compliance with Northland Regional Council consents
The average consumption of drinking water per day per resident within Kaipara district. Average calculated by the billed metered consumption (m3) x 1,000 divided by the number of connections x 365 x 2.5 (occupancy rate).	Dargaville 275 Maungatūroto 340 Ruawai 130 Glinks Gully 52 Mangawhai* 230 *Mangawhai calculation to consider the campground	Dargaville 275 Maungatūroto 340 Ruawai 130 Glinks Gully 52 Mangawhai* 230 *Mangawhai calculation to consider the campground	Dargaville 275 Maungatūroto 340 Ruawai 130 Glinks Gully 52 Mangawhai* 230 *Mangawhai calculation to consider the campground
Major capital projects are completed within budget.	Achieved when completed at or below budget	Achieved when completed at or below budget	Achieved when completed at or below budget

¹Real water loss is calculated by subtracting the meter readings and 'other components' from the total water supplied to the networked reticulation system.

Changes in levels of service

There will be no changes to the level of service.



Significant negative effects

Identified significant negative effect/issue	Mitigation
<p>Drought</p> <p>People will not have enough water thus affecting both household and commercial premises. Those on nonreticulated supplies or who capture their own water will be affected by reduced availability of water. Water carts may not be able to supply.</p>	<p>Apply water restrictions to manage the demand enabling an equitable distribution of water.</p> <p>The long-term plan is to increase capacity through consent renewal, alternative water sources and storage solutions.</p>
<p>Drinking water</p> <p>Non-compliance can occur at the water treatment plant (WTP) or within the water network.</p>	<p>Asset management planning activities, including:</p> <ul style="list-style-type: none"> • asset development work • monitoring and testing • demand management initiatives, and • public education, including water conservation programmes. <p>Stringent monitoring and testing regimes are in place to control and supply the community with compliant drinking water.</p>
<p>Water system</p> <p>Water treatment system failure could affect dialysis patients.</p>	<p>Our contractors have a list of dialysis patients and notify them immediately of any outages, supplying water if needed.</p> <ul style="list-style-type: none"> • Asset management planning activities, including: • asset development work • monitoring and testing • demand management initiatives, and • public education, including water conservation programmes.
<p>Pipes</p> <p>Breaks in the lines are unpredictable and difficult to detect in wet weather. However, any rapid reservoir depletion is a trigger for network investigation.</p>	<p>We mitigate potential negative effects through a mix of asset management planning activities, including:</p> <ul style="list-style-type: none"> • asset development work • monitoring and testing for leak detection • demand management initiatives, and • public education, including water conservation programmes.

Prospective Funding Impact Statement

Water Supply	Annual Plan	Budget	Budget	Budget
For the year ended: 30 June	2023/2024 \$'000	2024/2025 \$'000	2025/2026 \$'000	2026/2027 \$'000
Sources of operating funding				
General rates, uniform annual general charges, rate penalties	0	0	0	0
Targeted rates	4,619	4,204	4,503	4,695
Subsidies and grants for operating purposes	0	0	0	0
Fees and charges	567	507	507	507
Internal charges and overheads recovered	0	0	0	0
Interest and dividends from investments	0	0	0	0
Local authorities fuel tax, fines, infringement fees and other receipts	0	0	0	0
Total operating funding	5,186	4,711	5,010	5,202
Application of operating funding				
Payments to staff and suppliers	1,989	1,949	2,089	2,091
Finance costs	149	155	139	170
Internal charges and overheads charged	1,270	896	918	884
Other operating funding applications	0	0	0	0
Total applications of operating funding	3,409	3,001	3,146	3,145
Surplus (deficit) of operating funding	1,777	1,710	1,863	2,057
Sources of capital funding				
Subsidies and grants for capital expenditure	0	1,300	0	0
Development and financial contributions	57	57	57	57
Increase (decrease) in debt	852	-42	445	758
Gross proceeds from sale of assets	0	0	0	0
Lump sum contributions	0	0	0	0
Other dedicated capital funding	0	0	0	0
Total sources of capital funding	909	1,315	502	815
Applications of capital funding				
Capital expenditure	0	0	0	0
Capital expenditure - to meet additional demand	0	150	150	150
Capital expenditure - to improve the level of service	1,452	950	750	1,100
Capital expenditure - to replace existing assets	1,333	1,300	1,500	1,600
Increase (decrease) in reserves	-99	624	-34	22
Increase (decrease) of investments	0	0	0	0
Total applications of capital funding	2,686	3,024	2,366	2,872
Surplus (deficit) of capital funding	-1,777	-1,710	-1,864	-2,057
Funding Balance	0	0	0	0