Water Supply Manage and Maintain Assets



At a Glance

Primary Services

• Water treatment and reticulation

Why We Do It

- Council's vision is for everybody in the Far North to have access to sufficient, safe, and reliable sources of drinking water that is provided in a sustainable manner. The water treatment plants, pumping stations, and reticulation systems contribute to that by providing the treatment and delivery of safe drinking water to communities served by Council owned systems.
- Water supply is regarded as one of the core functions of Council, as provided by statute. The Local Government Act 2002 generally requires the continued operation of any water system that Council operated at the time the Act was passed, as well as continuing to operate any new system that Council constructs from that date.

What Has Changed Since The LTCCP 2009/19?

- New reservoirs were not required to be constructed to meet demand. However, this will be subject to future growth forecasting.
- The Omanaia new water supply will be progressed following community consultation.





Priorities For 2011/12	What We Have / Haven't Achieved
Reviewing options for the supply of water	The drought of 2010 caused Council to review its water strategy across the district in view of the last comparable period of low rainfall occurring in the 1980's. One of the most seriously affected communities was Kaitaia where river flows reached historical low levels and the Kauri dam, due to its small size became unusable due to algae bloom derived from the natural environment and the high water temperatures. Council has applied for, and has been granted the resource consent to draw from the Aupouri Aquifier and we are now actively planning to complete the well head and pipeline project in 2013. Council has upgraded the capacity of the Kerikeri water treatment plant to maximise the capability to treat the available raw water supply. Council has work planned to increase the capacity of the Paihia treatment plant. Development of the Omania-Rawene reticulation and treatment capacity has not taken place despite consultation with the affected community. Community concern over the cost of providing potable water to the approximately 50 households involved and the conditions governing the availability of the subsidy has deferred further progress.
Providing a secure water source for Kaitaia	Council has obtained resource consent to extract water from the Sweetwater aquifer. A project to install borehole supplies and transmission to the public system has been approved to proceed under a BOOT (build, own, operate & transfer) project.
Limiting extensions to reticulation in line with falling demand from new development	There have been limited numbers of new connections in line with current development requirements.
Reducing operating costs	Operating costs have been maintained within budget and below current inflation rates, despite high increases experienced in energy costs.
Investigating rain water harvesting at Opononi / Omapere	Detailed investigations and analysis are still required to better understand the benefits, funding requirements and ratepayer impacts, expected to be undertaken during the next period.
Introduction of a bylaw for rainwater tanks on new properties	The rainwater tank bylaw has not been formally introduced although it is expected that it will be developed over the next period.



Future Issues / Challenges	Implications
Climate change, which threatens to increase the likelihood of droughts and future water shortages	Requires water conservation measures, community education about water conservation, and action to secure future supplies. Council must take steps to reduce levels of water lost from its systems through leakage and unauthorised use.
Higher environmental standards – resource consents will impose tighter restrictions on the amount of water we can take from rivers and streams	Review adequacy of water sources and possible requirements for additional future supplies and / or engage with communities to identify other solutions that will reduce demand for non potable water use.
Increased demand for the service as a result of the growth of the district and of tourism	Requires upgrades of systems and provision of additional infrastructure in conjunction with growth – possible new treatment plants, treatment plant upgrades, additional treated water reservoirs, bores, and upgraded reticulation.
Increasing operating costs (power, fuels and chemicals)	Requires cost management via leakage reduction, water conservation, planned maintenance, and power and fuel management.
Meeting latest New Zealand fire fighting water supplies standard	Requires improved flow rates in urban / commercial areas.
Raw water connections on the Omanaia-Rawene and Kaitaia schemes posing a potential risk to public health	Review of options to mitigate potential risks. Collaboration with users to ensure sustainable solutions.



TPM = Total number of Performance Measures Performance 2010/11 vs. 2011/12 - has improved

Statement of Service Performance

For WATER SUPPLY the following pages detail:

- I. Service performance information provides levels of service comparative results for 2010/11 and 2011/12 including achievements and issues.
- 2. Financial performance including comparisons against budget 2011/12.

FYI: Key symbols are used to identify each measure contributing to community outcomes. For more information on community outcomes please refer to page 79.

PH Public Health PS Public Safety EM Environment SC Services that support Communities

Council initiatives		Measure	EM
Treatment plant upgrad	es	Number of failures of	of resource consent determinants.
Result 2010/11: 73	Target 2011/12: 0	Result 2011/12: 3	Not Achieved - Comments: This measure is based on daily water take limits for all district wide water treatment sources, and the result reflects only a very minor exceedence as a result of plant breakdowns.
Council initiatives	PC	Measure Number of systems	achieving grade Bh (8 systems in all)
Result 2010/11: 2	Target 2011/12: 2	Result 2011/12: 2	Achieved - Comments: The target has been achieved and maintained through careful budgetary planning and collaborative approach to working with Council's contractors.
Council initiatives Construct additional tre	ated water storage	Measure Interruptions to supp exceed 24 hours in a (This measure is asse individual houses.)	PH PS oly of water into the reticulation system out of the reserves not to any I year. ssing water leaving the reservoir into the reticulation system, and not
Result 2010/11: 100%	Target 2011/12: 100%	Result 2011/12: 100 %	Achieved - Comments: Result achieved by managing Council's contractors to ensure service levels are maintained at all times.
Council initiatives Water conservation		Measure Reduction in per cap	ita water consumption.
Result 2010/11: 0%	Target 2011/12: 2%	Result 2011/12: 0%	Not Achieved - Comments: Council has very limited ability to manage the consumption of water by the public.
Council initiatives Water conservation		Measure Percentage of unacco	punted for water (leakage, illegal connections, unauthorised use.)
Result 2010/11: 28%	Target 2011/12: 25%	Result 2011/12: 29 %	Not Achieved - Comments: Although it is noted that the calculated result figure is inflated and includes non-revenue authorised use i.e. non metered supplies, fire service drills etc. Leakage detections works and repairs have been undertaken during the period. An alternative method of measurement is to be introduced.
			-
Council initiatives General improvements	in service	Measure Percentage of very s	atisfied / satisfied respondents (Communitrak Survey).
Result 2010/11: 82%	Target 2011/12: 85%	Result 2011/12: 81%	Not Achieved - Comments: Customer feedback suggests taste and odour as an area of

dissatisfaction. Additional monitoring measures have been proposed.

S

PH Public Health PS Public Safety EM Environment SC Services that support Communities

Council initiatives Customer service		Measure Percentage of service	e disruptions resolved in less than 4 hours.	EM
Result 2010/11: 96%	Target 2011/12: 92%	Result 2011/12: 97%	Achieved - Comments: Proactive management of the alliance contract and the implementation of routine maintenance programs assisted in maintaining the standards.	
Council initiatives Optimise water flow and	d pressure	Measure Reduction in number	r of bursts per km of pipe.	SC
Result 2010/11: 0.44	Target 2011/12: 0.52 (15)	Result 2011/12: 0.11 (3)	Achieved - Comments: This has been achieved by the replacement of ageing assets using a risk based renewals programme.	
Council initiatives Reduce operational cost	ts per m ³ of water	Measure Operational cost (\$ /	/ cubic metres).	PH
Result 2010/11: 0.83	Target 2011/12: 1.023	Result 2011/12: 0.85	Achieved - Comments: Achieved by optimising operational efficiencies resulting in minimal cost increases.	
Council initiatives Treatment plant upgrade	es	Measure Percentage complian (this measure is asses	ce with New Zealand drinking water standards sed on compliance with ecoli only).	PH
Result 2010/11: 100%	Target 2011/12: 98.5%	Result 2011/12: 100%	Achieved - Comments: Achieved by concentrating on compliance procedures being a key component of delivery of potable water:	
Council initiatives Extend coverage of publ	lic water systems	Measure Number of connection (Due to slower growth accordingly.Target set	ons 1 than anticipated the number of connections has been reduced in LTCCP was 9,640).	PH
Result 2010/11: 9,533	Target 2011/12: 9,400	Result 2011/12: 9,914	Achieved - Comments: Target has been achieved despite limited development.	

.

Wastewater Manage and Maintain Assets



At a Glance

Primary Services

• Wastewater treatment and reticulation

Why We Do It

- Council's vision is that the Far North's coastal marine, river waters and lakes are healthy at all times, so that they support healthy marine and freshwater ecosystems, recreational use, fishing and shellfisheries.
- Sewage treatment plants, pumping stations and reticulation systems contribute by controlling the quality of effluent and minimising the risk of sewage overflows and spills.
- The work programme is driven by community expectations about the quality of our environment and the need for sustainability by reducing our overall impact on the environment, both now and in the future.
- The sewerage activity is one of the core activities of Council as confirmed by statute in the LGA. Generally, the LGA requires the continued operation of any sewerage system that Council operated at the time the LGA was passed and the continued operation of any new system that Council constructs after that date.

What Has Changed Since The LTCCP 2009/19?

The following projects have been deferred to allow for resource consent amendments:

- Paihia wastewater treatment plant is deferred to 2013/14 subject to a Council decision regarding the methodology related to the Bay of Islands project.
- Kaikohe wastewater treatment plant will commence in 2012/13.



Priorities For 2011/12	What We Have / Haven't Achieved
Completing the installation of new reticulation at Ngawha	Project has been successfully completed.
Completing the installation of new treatment plant at Kaeo	Project has been completed and is in service currently undergoing its commissioning stage.
Obtaining the Bay of Islands wastewater treatment plant resource consent	The resource consent has now been obtained.
Agreeing the strategy for the implementation of Kerikeri reticulation	Options and funding strategy is currently being evaluated and will be subject to a special public consultation process.
Addressing with the community the recently discovered design problems with the Hihi wastewater reticulation	Following community engagement a request for changes to the resource consent to allow non prescriptive less costly processes to be considered was duly agreed with Northland Regional Council.
Commencing the upgrade of the Paihia treatment plant subject to the resource consent	Design options for the upgrade have commenced recently following receipt of the new resource consent.
Commencing the Awanui and Opua reticulation projects	Both projects have been awarded following tender with construction of the Opua project currently in progress.
Obtaining resource consents renewals for Rawene, Ahipara and Kawakawa wastewater treatment plants	Resource consent applications have been made for all schemes which have been notified and subject to resolution of submissions. The Rawene consent has been issued but is subject to appeal at present.
Limiting extensions to reticulation in line with falling demand for new development	There have been limited numbers of new connections in line with current development requirements.
Reducing operating costs by utilising enhanced biological treatment processes	Worm composting is being used to improve environmental performance and minimise costs at the Council's new wastewater treatment plant in Kaeo.
	of traditional sewage treatment processes.
	The treatment process will still rely on screens, settling ponds, biological filtration and wetland cells to polish treated effluent.
Investigating new technology for wastewater treatment	In addition to vermifilter and floating wetlands Council is also considering sequence batch reactors, high rate filtration and fixed film biological processes.



Future Issues / Challenges	
Minimising environmental impact	

Future Issues / Challenges	Implications
Minimising environmental impact	A continued programme of improving environmental awareness throughout the community so that everybody can play their part in protecting our environment.
	Action to ensure compliance with the onsite sewage treatment bylaw.
	Installation of new sewerage systems and treatment plants in cur- rently unserved communities where subsidy support is available.
Higher environmental standards in resource consents	Requires upgrade of existing systems and higher specifications for new systems in order to improve the quality of treated effluent.
Sewage spills	Requires continued and improved sewer maintenance.
Increasing operating costs	Requires new works and upgrades using low operating cost solutions.
Climate change	Increased costs incurred resulting from potential impacts of drought, flooding and storms.

Highlights of Performance



TPM = Total number of Performance Measures

Statement of Service Performance

For WASTEWATER the following pages detail:

- 1. Service performance information provides levels of service comparative results for 2010/11 and 2011/12 including achievements and issues.
- 2. Financial performance including comparisons against budget 2011/12.

FYI: Key symbols are used to identify each measure contributing to community outcomes. For more information on community outcomes please refer to page 79.

S

PH Public Health PS Public Safety EM Environment

Council initiatives Treatment plant upgrad	es	Measure Number of failures o	f resource consent determinants.	EM PH
Result 2010/11: 38	Target 2011/12: 18	Result 2011/12: 32	Not Achieved - Comments: In part this has resulted from higher quality standards arising from resource consent renewals, where plant upgrades have been subject to delay in implementation. Also improved qual monitoring has highlighted that targets set may be over optin but similar stretch goals will be retained in search of improve in this important area; there are new KPI's in the LTP for futu years relating to discharge flow and quality limits.	lity mistic, ement ure

Council initiatives Implementation of spill n	nanagement programme	Measure Number of spills of s	ewage to water.
Result 2010/11:	Target 2011/12: 9	Result 2011/12: 8	Achieved - Comments: Council achieved this by a risk analysis of facilities most likely to cause spillage, and focussing attention and resources to manage those risks appropriately.

Council initiatives General service improve	ements	Measure Percentage very satisfied / satisfied respondents (Communitrak Survey).		PH EM
Result 2010/11: 87%	Target 2011/12: 85%	Result 2011/12: 87%	Achieved - Comments: This has been achieved by monitoring on a regular basis to en levels of service are consistently met by Council's contractors	nsure

Council initiatives Improvements in infrast	Measure ructure and equipment Percentage of service disruptions resolved in less than 4 hours.		Measure Percentage of service disruptions resolved in less than 4 hours.	
Result 2010/11: 99%	Target 2011/12: 95%	Result 2011/12: 99%	Achieved - Comments: Result achieved by implementing improved monitoring and response procedures through management of Council's contract	ors

Council initiatives Extend coverage of pub	lic wastewater systems	Measure Number of connections (Due to slower growth than anticipated the number of connections has been reduced accordingly. Target set in LTCCP was 10,900).		PH EM
Result 2010/11: 10,648	Target 2011/12: 10,650	Result 2011/12: 10,724	Achieved - Comments: Achieved by reducing the target to realistic levels, taking accord of the slowdown in the economy and associated effects on development.	ount



.

Refuse and Recycling Sustaining our Environment



At a Glance

Primary Services

- Waste management including refuse
- Transfer stations and recycling

Why We Do It

- Council's vision is for the Far North to waste nothing of value or use, and the amount of waste generated in the Far North is kept to a minimum, so that the maximum value is realised from our renewable resources.
- The refuse and recycling services contribute to the vision by providing the facilities and opportunities to enable the communities in the district to dispose of their waste in a way that minimises the harmful environmental effects, and maximises the opportunities for recycling.
- Council is involved in refuse and recycling because effective management is necessary to protect public health and the environment.

What Has Changed Since The LTCCP 2009/19?

There are no significant changes to the refuse and recycling priorities since the publication of the 2009/19 LTCCP.



Priorities For 2011/12	What We Have / Haven't Achieved
Reducing the material going to landfill by increasing reuse and recycling	The amount of waste to landfill has been reduced down to 276kg per head of population.
Continuing to work with Council's contractors to improve services	We have worked with contractors to provide community recycling stations at Rawene, Whangaroa, Peria and Broadwood.
Developing education packages for schools on recycling	We contract CBEC Ecosolutions to provide education in schools on recycling along with reduce, reuse and recovery.

Future Issues / Challenges	Implications
Need to provide security to meet long term disposal requirements	Consideration of disposal options for waste minimisation to landfill.
Changing transport / fuel costs	Must be addressed when considering future waste disposal options.
Community expectations regarding refuse and recycling services	Expectation may not be affordable for the community.
Climate Change (Emissions Trading) Amendment Act 2008	Increased charges for landfill disposal from 1 January 2013.



TPM = Total number of Performance Measures Performance 2010/11 vs. 2011/12 - is neutral

Statement of Service Performance

For REFUSE and RECYCLING the following pages detail:

- I. Service performance information provides levels of service comparative results for 2010/11 and 2011/12 including achievements and issues.
- 2. Financial performance including comparisons against budget 2011/12.

FYI: Key symbols are used to identify each measure contributing to community outcomes. For more information on community outcomes please refer to page 79.

PH Public Health EM Environment

Council initiatives Measure Improvements in recycling facilities Percent.		Measure Percentage by tonna	sure entage by tonnage of waste that is recycled / reused.	
Result 2010/11: 54.78%	Target 2011/12: 55%	Result 2010/11: 54.87%	Not Achieved - Comments: A drop in recycling reflects the down turn in economy.	
Council initiatives Introduction of green w. Implementation of envir awareness programme	aste processing. onmental	Measure Per capita volume of refuse from district disposed of at landfills.		EM
Result 2010/11: 1.51	Target 2011/12: 1.55	Result 2011/12: 1.38	Achieved - Comments: The volume of waste to landfill continues to drop influenced by the economy.	ł
Council initiativesMeGeneral service improvementsPeiCc		Measure Percentage of respondents very satisfied /satisfied with refuse service in Communitrak Survey.		PH EM
Result 2010/11: 68%	Target 2011/12: 75%	Result 2011/12: 80%	Achieved - Comments: The increase in satisfaction is that more people are making u the kerbside refuse services provided by others. There has been a notable drop in volume of refuse to transf stations. Standards at transfer stations have been maintained	use of fer

Council initiatives Improvements in infrastr	ructure and equipment	Measure It Percentage of respondents very satisfied / satisfied with recycling services in Communitrak Survey.	
Result 2010/11: 72%	Target 2011/12: 80%	Result 2011/12: 78%	Not Achieved - Comments: Main factor for missing target is a customer belief for 'free' kerbside recycling.

Financial Information Water and Waste Management

FINANCIAL SUMMARY

FOR THE YEAR ENDED 30 JUNE 2012

			COUNCIL	
	NOTE	ACTUAL	BUDGET	VARIANCE
		2012	2012	
		\$000s	\$000s	\$000s
Income				
Rates income	I	22,482	21,441	1,041
Other income	2	1,706	6,627	(4,921)
Total operating income		24,188	28,068	(3,880)
Expenditure				
Direct costs	3	14,245	2,49	(1,754)
Indirect costs	4	373	803	430
Activity expenditure		14,618	I 3,294	(1,324)
Depreciation	5	5,848	5,788	(60)
Interest payable		3,623	4,593	970
Total operating expenditure		24,089	23,674	(415)
Net operating surplus / (deficit)		99	4,394	(4,295)
Capital statement				
Net operating surplus		99	4,394	(4,295)
Loans		2,539	7,759	(5,220)
Other funding		3,894	3,380	514
Total funding		6,532	15,533	(9,001)
New work	6	2,602	12,124	9,522
Renewal works	6	1,599	344	(1,255)
Loan repayments		4,453	3,066	(1,387)
Total capital expenditure		8,654	15,534	6,880
NET SURPLUS / (DEFICIT)		(2,121)	0	(2,121)

.....



VARIANCE TO THE ANNUAL PLAN 2011/12

- I. Rates income is showing a favourable variance of \$1,041k predominantly due to:
 - a. An increase in penalty rate income of \$1,234k; and
 - b. Water and wastewater service fees are showing an unfavourable variance of \$501k which is offset by a favourable variance in water by meter charges of \$264k.
- 2. Other income is showing an unfavourable variance of \$4,921k predominantly due to:
 - a. Service fees & charges showing an unfavourable variance of \$692k as a result of reduced refuse tonnage at transfer stations and waste taken to septage disposal points by contractors;
 - b. Subsidies are showing an unfavourable variance of \$3,595k due to timing delays;
 - c. Development contributions income is below budget by \$1,073k due to a reduction in applications during the year;
 - d. Recovery income of \$192k has been received that was not budgeted. This relates to insurance recoveries relating to the Cyclone Wilma 2011 weather event; and
 - e. Vested assets of \$224k were received during the year and these are unbudgeted.
- 3. Direct costs are showing an unfavourable variance of \$1,754k predominantly due to:
 - a. Salary costs are showing an unfavourable variance of \$193k;
 - b. External services are showing an unfavourable variance of \$795k mainly due to cancelled or amended capital projects;
 - c. Contractor and professional fees is below budget by \$593k due to low volumes of waste being processed at transfer stations offset by efficiencies being met by the main contractor for water and wastewater;
 - d. Loss on disposal of property, plant & equipment of \$239k;
 - e. Direct allocations are showing a favourable variance of \$61k to budget; and
 - f. Bad debt provisions exceeded budget by \$827k due to increased penalty charges.
- 4. Indirect costs are showing a favourable variance of \$430k due to:
 - a. Decrease in corporate allocations \$430k.
- 5. Depreciation is showing an unfavourable variance of \$60k.
- 6. Capital expenditure is showing a favourable variance of \$8,267k predominantly due to delays in the commencement of projects.

KEY CAPITAL PROJECTS FOR THE YEAR ENDED 30 JUNE 2012

		COUNCIL	
	ACTUAL	BUDGET	VARIANCE
	\$000s	2012 \$000s	\$000s
New Works			
Transfer stations	47	45	(2)
Landfills	88	125	37
Recycling	5	0	(5)
Wastewater operations	0	255	255
Wastewater schemes	1,825	9,977	8,152
Water schemes	637	1,753	1,116
Total new works	2,602	12,124	9,522
Renewals			
Transfer stations	6	69	63
Wastewater schemes	989	177	(812)
Water schemes	604	98	(506)
Total renewals	1,599	344	(1,255)

SIGNIFICANT ACQUISITIONS OR REPLACEMENTS OF ASSETS FOR 2011/12

The Local Government Act 2002 requires Councils to provide information regarding any significant assets acquired or replaced during the year. Council's Significance Policy does not specify a value but does identify the following assets as significant:

WASTEWATER NETWORKS AND TREATMENT WATER TREATMENT, STORAGE AND SUPPLY NETWORK	BUDGET 2012 \$000s	ACTUAL 2012 \$000s
Wastewater schemes Hihi treatment plant Work to develop a new wastewater scheme for the Hihi area	2,060	86
Kaeo treatment plant upgrade Proposed upgrade of the treatment plant for Kaeo	300	438
Paihia treatment plant Proposed upgrade of the treatment plant for Paihia	1,600	52
Water schemes Awanui reticulation Ongoing minor renewals across the district	3,200	76
Kaitaia new source Proposed water source for Kaitaia	500	331
Rawene treatment upgrade Major project for the Rawene-Omania area	1,000	13

VARIANCE TO THE ANNUAL PLAN 2011/12

- Hihi treatment plant This project is currently development and was delayed to ensure a suitable solution was put in place.
- Paihia treatment plant This forms part of the solution to phases I and 2 of the Bay of Islands wastewater scheme.
- Awanui water reticulation Awanui project progress was affected by design concerns raised over the capacity of the downstream catchment, which required additional modeling work to verify adequacy.
- Rawene treatment upgrade
 Delayed due to extensive consultation with the community.