



WATER SUPPLY

Ngā Puna wai hei oranga mō te rohe whānui

WHAT THESE ACTIVITIES WILL COST AND HOW WE ARE GOING TO PAY FOR THEM

FUNDING IMPACT STATEMENT

ANNUAL PLAN 2011/12 \$000		LTP 2012/13 \$000	LTP 2013/14 \$000	LTP 2014/15 \$000	LTP 2015/16 \$000	LTP 2016/17 \$000	LTP 2017/18 \$000	LTP 2018/19 \$000	LTP 2019/20 \$000	LTP 2020/21 \$000	LTP 2021/22 \$000
OPERATIONAL											
Sources of operating funding											
	- General rates, uniform annual general charges, rates penalties	-	-	-	-	-	-	-	-	-	-
1,896	Targeted rates (other than a targeted rate for water supply)	2,029	2,169	2,219	2,324	2,459	2,569	2,644	2,697	2,818	2,919
	- Subsidies and grants for operating purposes	-	-	-	-	-	-	-	-	-	-
2,890	Fees, charges, and targeted rates for water supply*	3,151	3,364	3,445	3,606	3,814	3,982	4,101	4,185	4,373	4,529
286	Internal charges and overheads recovered	172	175	179	182	187	193	200	207	216	224
4	Local authorities fuel tax, fines, infringement fees, and other receipts	11	11	12	12	13	13	14	14	15	15
5,076	Total operating funding (A)	5,363	5,719	5,855	6,124	6,473	6,757	6,959	7,103	7,422	7,687
Applications of operating funding											
1,454	Payments to staff and suppliers	1,491	1,529	1,582	1,675	1,756	1,800	1,876	1,966	2,026	2,122
455	Finance costs	459	495	521	563	631	745	761	775	838	831
2,166	Internal charges & overheads applied	1,992	2,055	2,115	2,158	2,226	2,318	2,380	2,475	2,591	2,678
	- Other operating funding applications	-	-	-	-	-	-	-	-	-	-
4,075	Total applications of operating funding (B)	3,942	4,079	4,218	4,396	4,613	4,863	5,017	5,216	5,455	5,631
1,001	Surplus (deficit) of operating funding (A-B)	1,421	1,640	1,637	1,728	1,860	1,894	1,942	1,887	1,967	2,056
CAPITAL											
Sources of capital funding											
	- Subsidies and grants for capital expenditure	-	88	914	664	-	-	-	-	-	-
37	Development and financial contributions	25	26	27	28	29	30	31	32	34	35
1,089	Increase (decrease) in debt	(182)	(415)	(255)	587	1,493	1,386	(447)	734	332	(381)
	- Gross proceeds from sale of assets	-	-	-	-	-	-	-	-	-	-
	- Lump sum contributions	-	-	-	-	-	-	-	-	-	-
1,127	Total sources of capital funding (C)	(157)	(301)	686	1,279	1,522	1,416	(416)	766	366	(346)
Applications of capital funding											
Capital expenditure											
355	- to meet additional demand	41	43	44	269	568	49	51	53	55	57
260	- to improve level of service	240	114	1,075	1,779	2,171	2,127	-	1,068	685	-
1,646	- to replace existing assets	1,079	635	562	1,042	615	579	2,324	499	548	1,340
(134)	Increase (decrease) in reserves	(96)	547	642	(83)	28	555	(849)	1,033	1,045	313
	- Increase (decrease) of investments	-	-	-	-	-	-	-	-	-	-
2,127	Total applications of capital funding (D)	1,264	1,339	2,323	3,007	3,382	3,310	1,526	2,653	2,333	1,710
(1,001)	Surplus (deficit) of capital funding (C-D)	(1,421)	(1,640)	(1,637)	(1,728)	(1,860)	(1,894)	(1,942)	(1,887)	(1,967)	(2,056)
	- Funding Balance ((A-B) + (C-D))	-	-	-	-	-	-	-	-	-	-

* Targeted rates for water supply include volumetric charges only

THE COMMUNITY OUTCOMES THIS ACTIVITY CONTRIBUTES TO



WATER SUPPLY



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WHAT THIS ACTIVITY DELIVERS

We provide water to over 12,300 households and businesses throughout the District. This water is treated to ensure it is safe to drink. We aim to provide water continuously and at a suitable pressure and quantity. We operate 10 different water supply schemes to provide water throughout the District. Each scheme operates slightly differently. The water we provide comes from a variety of sources such as rivers, springs and bores. We then treat the water, as needed, to ensure it is safe to drink. Pump stations help to transport the water to our storage reservoirs and then it is gravity fed through our pipe networks to each property. Some of our water connections have meters on them, which measure how much water is used on that property. In Whakatāne, Ōhope, Plains and Rūātoki, all connections are metered, while our other unmetered schemes have some commercial properties that are metered. For metered properties, people pay based on their consumption level. Properties not metered pay a fixed price based on an average consumption rate.

The water pressure we deliver varies across the District depending on the scheme and physical location of the property. We try to ensure the service we deliver is of a high enough pressure to fulfil the needs of businesses and homes. Our aim is to provide drinking water that meets the current Drinking Water Standards of New Zealand.

This activity also provides the infrastructure for water supply required for future developments, such as new subdivisions or new businesses, schools etc.

For properties in the District that are not connected to the Council's water supply network, we provide an advisory and education service as required.

WHY WE DO IT

There is a strong community demand for us to provide this activity. The main reason we deliver this activity is to protect public health. For households, this means you have healthy drinking water and fresh water to wash with.

We also promote public safety by ensuring adequate water pressure is available across the urban areas for fire fighting for residential dwellings. Larger non-domestic buildings require special systems to increase the fire fighting capacity.

Metered water connections were introduced to help manage water demand.

Under the Local Government Act 2002, we are required to provide the community with a reliable supply of safe drinking water, where this service has previously been delivered. This means we cannot cease to offer this service to households and businesses currently connected to our system.

RESPONDING TO OUR ISSUES

How secure is our water supply?

Our water schemes throughout the District have different water sources and individual processes to get it to our households. We have been looking at the security of our supplies and in particular what would happen if there was a major problem, resulting from a mechanical failure or a

natural disaster. Nine of our 10 schemes have only one water source, with the exception being the Plains scheme. With one source and no back-up system, our water supply can be vulnerable if a major fault occurred.

The Whakatāne water scheme is our biggest water supply, providing water for Whakatāne and Ōhope. This scheme covers the water supply for half of the District's population. While risks are present in all of our water schemes, particularly from a mechanical supply failure or a pipe breakage, the security of the water supply in the Whakatāne scheme is our most significant issue for this activity. With the water supply for this scheme coming from the Whakatāne River, it is vulnerable to seasonal effects during long dry summers. We have already experienced this to a small degree with salt water and algae blooms impacting on the Whakatāne township supply and no alternative source to get our water from. These have been relatively minor incidents to date, but the potential for a serious bacterial outbreak could cause a serious health risk and hazard, particularly for health care, businesses and schools.

To address the potential for a high risk incident affecting the Whakatāne water supply, we are investigating an alternative water supply source. Investigations have been focussed on finding a ground source (bore) that is close to the Whakatāne water treatment plant. This is an ongoing investigation and potential water sources have been mapped, with at least one source being confirmed 5km from the water treatment plant. A source is still being sought closer to town and this work will lead to an alternative or back-up source to help protect our water supply. The budget for this project has been carried forward from our last LTP and no budget has been planned for this LTP until a final source has been confirmed.

To minimise potential risk involved with bulk supply in other schemes, we have either provided adequate storage capacity or projects are underway to increase the storage capacity.

Ageing pipes and connections need replacing

A lot of the water pipes around the District were laid back in the 1960s and 1970s when asbestos concrete pipes were used. These pipes are starting to age now and a continuous assessment of the pipes has shown that the condition of some pipes is deteriorating. A programme has been planned through this LTP to replace pipes that are uneconomical to maintain over the next 10 years in Whakatāne, Edgcumbe, Plains, Matatā, Murupara and Tāneatua. Pipes in other schemes do not need replacing within the next 10 years.

Many connections and meters in the District are also reaching the end of their life and need replacing. A connection replacement programme is planned for Edgcumbe, Matatā, Whakatāne and Ōhope.

Water on the Plains

There are two main issues in the Plains scheme. Firstly, there is arsenic in the water supply which is above the levels in the Drinking Water Standards. The second issue is about supply and demand. There is not enough pressure and flow to meet the demands of the whole scheme at the same level. The pipe networks were not designed to cater for this level of demand in some areas including Awakeri.

A 50 year strategy is being developed for the Plains Water Scheme. The strategy is taking into account the present





Aerial view of Ruatoki showing waterpipes in blue

issues while also considering future demand. The strategy will be consulted on with the community and stakeholders in the coming years, before being finalised. It is proposed that once the strategy has been finalised, it will include projects to address the two current issues and projects to manage future demand. These projects will probably include upgrading pipe capacity and extending the system to cater for domestic and business demands. If the strategy is accepted by the stakeholders, the projects will be implemented in stages to reduce the financial burden to the community. This will hopefully see an increase in water pressure and quantity, improving the service provided.

A high cost project likely to come out of the 50 year strategy is an alternative bore within the Plains area. However, such a project will not continue until the community has been fully consulted. The proposal for an alternative bore is likely to be situated on Paul Road, where a trial bore has been established this as a viable source. A resource consent has also been granted by the Bay of Plenty Regional Council to extract water for 30 years and we are currently working to purchase the land on which the bore is sited. If the community agrees to the proposal, the Paul Road bore could provide water for the Edgecumbe and Te Teko townships, as well as the Awakeri and Onepu areas. The water is of a very good quality, however, chlorine would need to be added to the water source because of the potential for contamination as a result of the large area that would be covered by the pipe network.

As part of the 50 year strategy a review will also be undertaken on the charging regime for the Plains Water Supply. This will take into consideration the upgrade works undertaken and the larger number of properties able to be connected to the system.

Funding for water supplies

The water scheme in Rūātoki does not provide water for the whole Rūātoki community. A project is planned to upgrade and expand the reticulated system across the whole community. The project will include upgrading the water treatment plant, increasing the storage capacity, expanding the pipe network and ensuring the water meets the current Drinking Water Standards. Funding for this project is coming from Central Government through the Ministry of Health and Housing New Zealand.

We have also secured \$170,000 from the Ministry of Health for the construction of a new water reservoir in Matatā to improve the level of service in terms of capacity and fewer interruptions. This project is expected to be completed in the 2012/13 year at a total cost of \$224,000. An application for a subsidy will be made to the Ministry of Health for the remaining \$54,000. However, if we are unsuccessful in the application, the balance will be paid for through a long term loan.

Water water everywhere

While we seem to be surrounded by waterways, and often have an excess of floodwater around our District, we could also be prone to water shortages in future, especially in drier periods of the year. We also experience a rapidly increased population in the summer months due to holiday makers in some parts of our District. This puts increased pressure on our water supply networks and pipes. It is costly to upgrade our systems to cope with these peak periods and not economically or environmentally sustainable. Instead, we are looking to encourage water conservation in the community to try and smooth out this peak and delay the need for costly upgrades.

Water meters have been introduced to a large portion of our community. Meters can significantly reduce water consumption by raising awareness, but also by highlighting potential leaks and leading to their quick repair. No further extension of the meter connections is planned at this time, however, we would like to increase meters over time and would do this alongside consultation with the community. To further encourage the community to conserve water, we have in previous years implemented an increased charge for water use during the summer months. We will not continue peak water pricing through this LTP. Instead we have increased the amount of the water charge based on usage rather than fixed charge. This will have the effect of rewarding those households who conserve water and increasing the cost for those who use excessive water.

We are also focussing on improving education within the community to raise awareness. This includes providing information through leaflets in your rates bill and providing information and tips on our website: www.whakatane.govt.nz.

In addition we will develop a Water Conservation Strategy for the District. This will look at further opportunities for education as well as considering our operations and influencing decisions in our District Plan to encourage water conservation.

The ongoing costs of maintenance

Providing and managing the ongoing maintenance of the water supply around our District can be a costly exercise. It requires a lot of maintenance to ensure they remain safe and in good condition. Over the period of this LTP we have planned to spend \$9.94m on water supply renewals and minor upgrades. This includes replacements of various

assets such as pipes, pumps and valves, connections and repairs.

At the time of undertaking renewal works we often take this opportunity to upgrade our systems to improve levels of service. As a result of legislative changes, the Funding Impact Statement records these projects as being solely driven by an improvement in levels of service. Therefore, the true proportion of projects 'to improve level of service' is affected in the Funding Impact Statement.

All paying the same

There has been a change as to how we fund this activity. We will continue to use targeted rates, however instead of each scheme paying for their own costs, schemes will be amalgamated. This will mean everyone receiving water supply will pay the same. The exceptions are Ruatāhuna, the Plains and Murupara schemes. More information about this can be found in the 'All about rates' section.

We have recently reviewed our Assessment of Water and Sanitary Services. This LTP is consistent with the updated assessment. Copies of the assessment are available on our website: www.whakatane.govt.nz

WHAT WE ARE GOING TO DO

To respond to some of the issues, the Council is planning to undertake the following key projects. The full list of capital projects can be found in the 'Our Costs in Detail' chapter.

DESCRIPTION	YEAR	TOTAL (\$)	FUNDING SOURCE
Edgecumbe Water Supply - supply main from Paul Road	2012-16	1,800,000	Subsidy 85% Loan 15%
Plains Water Supply - Paul Road bore site and reticulation	2016-18	2,500,000	Loan 80% Development Contribution 20%
Plains Water Supply - pipe upgrades to improve flow and pressure	2016-21	2,000,000	Loan 100%
Water mains upgrade in Edgecumbe and Te Teko to improve fire flow	2016-18	550,000	Loan 100%

Note: The figures in this table are not adjusted for inflation.

WHAT NEGATIVE IMPACT THIS MIGHT HAVE

Sometimes the activities that we do can have a negative impact on one or more of the four well-beings. While we strive to ensure that we operate in a way that provides the most positive outcomes, we have to acknowledge that sometimes there is a trade-off. The table below shows the possible negative effects of this activity and also what we are going to do to try and minimise these effects.

SIGNIFICANT NEGATIVE EFFECT	AFFECTED WELL-BEING				SUSTAINABLE SOLUTION
	CULTURAL	SOCIAL	ECONOMIC	ENVIRONMENTAL	
Potential contamination of the raw water supply.	✓	✓	✓	✓	Emergency response plans, operational procedures and monitoring of the raw water supplies. Public Health Risk Management Plan.
Insufficient water supplies during times of drought or emergency.		✓	✓		Minor works are underway to ensure 24 hours worth of water storage is available, as well as ensuring a back up system is in place to provide tank water in our smaller schemes. Tests are underway on a back up bore for the Whakatāne area. Plains 50 year strategy.

WHAT WE WANT TO ACHIEVE

The Council has set some targets to show whether we are achieving our goals for this activity. The following table shows these targets for the next 10 years. We will report back to the community through the Annual Report each year, so you will know whether we have achieved this level of service.

GOAL	MEASURE	CURRENT PERFORMANCE (2010/11)	TARGET			
			YEAR 1 (2012/13)	YEAR 2 (2013/14)	YEAR 3 (2014/15)	YEARS 4-10
Provide a continuous and safe water system throughout the District's urban, residential and commercial areas that complies with drinking water standards	Percentage of water supply systems (excluding Plains) with adequate pressure to fill a 15 litre bucket in one minute	97%	95%	95%	95%	95%
	Percentage of the time our water schemes comply with specified New Zealand Drinking Water Standards	New Measure	90%	90%	90%	90%
	Satisfaction with the quality of drinking water supplied to resident's homes (Customer Satisfaction Index score)	64.3	62-66	63-67	64-68	65-69
	Percentage of pipe bursts and major breaks affecting urban systems responded to within one hour*	99.7%	99%	99%	99%	100%

*Note: actual works required to remedy breakages and blockages will vary according to the extent of the fault

HOW THIS ACTIVITY IS FUNDED

Our activities are funded from a variety of sources. The pie chart illustrates how we will pay for the operational running of this activity.

Further explanations on the funding of this activity can be found in the Revenue and Financing Policy contained in the 'Our Costs in Detail' chapter.

