

Network Services Group



What is the Networks Services Group of Activities?

Network Services are often referred to as infrastructural assets; they are usually network based and have generally been seen to be Council's core activities.

What activities are included in Network Services?

- Roding
- Water
- Wastewater
- Land Drainage
- Stormwater
- Solid Waste

Rationale for Network Services – why are these activities included?

The Network Services Group of activities delivers services which the community needs to function comfortably on a day to day basis and collectively must meet standards that provide a high level of community health and safety.

These activities operate on a network basis across the District, or in specific areas of the District, and all assets associated with these services have a lifecycle, maintenance and renewal programme. Council provides the infrastructure for the delivery of these Network Services and manages and monitors their maintenance, renewal, replacement and expansion.

Generally the user of the service pays and this is normally through user charges, general rates and targeted rates.

The operational cost to deliver Network Services is the most significant area of Council's expenditure and this is also reflected also in the level of capital works required to renew and expand these services. The Hauraki Community Plan 2009-19 allows approximately \$104 million for capital works on Network Services.

Roading

Primary rationale: Roads provide essential infrastructure that supports safety and community cohesion. Council develops the local roading network to ensure that people have access to and contribute to a healthy, connected community. The community expects that Council will provide the local roading network.

The local roading network connects at various points to the national roading network and Council works with the New Zealand Transport Agency to ensure a coordinated approach to roading infrastructure.

Water Supply

Primary rationale: Water is an essential need of both people and livestock. Council provides sufficient quantities of potable water for public amenity and to reduce the risk of water borne diseases affecting public health. Council provides water to enable livestock farming to have adequate water supplies. There is a community expectation that safe water will be

provided and Council undertakes this activity because of statutory obligation and public demand.

Wastewater

Primary Rationale: The Council provides wastewater collection, treatment and disposal systems to help achieve high quality public health and to minimise adverse effects on the receiving environment. There is a community expectation that high environmental standards will be met. Council undertakes this activity because of statutory obligations and public demand.

Land Drainage

Primary rationale: Council provides drainage systems to help preserve and enhance the productivity of the land in a sustainable manner by the effective management of the water table. In turn, Council is able to achieve high quality public safety, and protection of property, farmland and roads by drainage of excess water from weather events. There is a community demand for this service, also an expectation that sustainable management of the environment will be a key driver.

Stormwater

Primary rationale: Council aims to ensure the efficient, safe and continuous removal of stormwater to maintain transport and communication networks, minimise the risks of flooding to property and minimise risks to human life. There is a community expectation that adequate stormwater drainage will be provided. Council is seen to be the most appropriate organisation to provide this service and it is consistent with the rural land drainage function. Council has a statutory obligation to provide stormwater services in some areas.

Solid Waste

Primary rationale: Refuse collection and waste disposal services and facilities enable Council to meet its statutory obligations under the Waste Minimisation Act 2008. The services are also provided for health reasons and to keep the District looking tidy.

Existing community demand is for Council to provide this service in urban areas.

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How and which community outcomes do Network Services contribute to?

Community Outcomes	How Council currently contributes to this Outcome
Potentially all outcomes	<ul style="list-style-type: none"> Provision of a comprehensive roading network allowing for the community to function. Through maintaining support services such as, water supply, land drainage and the management of solid waste. By improvement through capital works programmes to the water supply and wastewater systems and improvements to Council data and planning for stormwater assets. Continuation of programmed capital works to meet District growth and demand.
Vibrant and sustainable businesses and business economies in our district.	<ul style="list-style-type: none"> Manages solid and liquid waste. Manages land drainage – in terms of farming Provides and improves water supply and waste water systems to support local business operations. Provides roads and roading infrastructure to support local business operations. Provides stormwater management, in terms of security for businesses from flooding.
Integrated provision of quality health and social services throughout our district.	<ul style="list-style-type: none"> Delivers a Road Safety Programme and maintains the District Road Safety Strategy to make the District's roads safe. Provides safe drinking water. Provides effective separation where practical between stormwater and sewage systems to prevent contamination and to assist in both public and environmental health. Provides dependable wastewater collection and treatment systems that protect public health. Provides dependable refuse and recycling collection services. Monitors the private water and wastewater systems in the Hauraki District. Provides safe footpaths for people to walk and run on.
Maintain and protect the vibrancy of rural communities within our district.	<ul style="list-style-type: none"> Manages the operation of land drainage systems within the District. Works with Environment Waikato to identify hazards and risks in land drainage schemes. Supports the work of Environment Waikato in the maintenance and operation of the schemes and flood pump stations.
Cultural values of the Tangata Whenua throughout the district be respected and supported through further development of consultation, participation and partnerships.	<ul style="list-style-type: none"> Operates a Consultative Committee for Water and Waste. Ensures that cultural values are always taken into account when planning to discharge wastewater into natural water. Ensures that cultural values are always taken into account when planning to take water from natural watercourses for public supply.
Hauraki District residents be given the opportunity to participate in educational and training programmes.	<ul style="list-style-type: none"> Provides a Road Safety Coordinator who deals with a road safety programme in the community.

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Community Outcomes	How Council currently contributes to this Outcome
Management of our natural and physical environment in a sustainable manner.	<ul style="list-style-type: none"> ▪ Observes as closely as possible limitations on raw water takes to minimise the effects on streams during low flow periods. ▪ Disposes of solid waste under contract at a consented landfill operation within the range of resource consents to achieve controlled and sustainable use of environmental resources. ▪ Operates transfer stations so that impact on the natural and physical environment is minimised. ▪ Provides and maintains dependable wastewater collection and treatment systems at an affordable cost. ▪ Provides dependable wastewater collection and treatment systems that protect public health. ▪ Examines all applications for building consents to ensure that adequate provision for wastewater collection and disposal is made. ▪ Monitors private wastewater systems in the District. ▪ Works with Environment Waikato to identify hazards and risks in land drainage schemes and support their work in the maintenance of the schemes. ▪ Operates within a range of resource consents for controlled and sustainable use of environmental resources.
Long term planning to ensure that our future infrastructure requirements meet the growth and development opportunities of our District.	<ul style="list-style-type: none"> ▪ Provides community agreed levels of service. ▪ Annually updates the Road Safety Strategy.

How does this activity promote sustainability?

The Network Services Group is responsible for Council's core activities. As a rule, the Network Services Group already works in a sustainable manner by ensuring that the continued provision of infrastructural services is available to future generations of the Hauraki community. It also endeavours to advance these sustainable principles by mitigating the adverse effects of these necessary activities, or promoting a more balanced set of well-beings to ensure that environmental, social, cultural and economic benefits are enhanced when making decisions. Some ways in which network services acts sustainably are:-

All Activities	<ul style="list-style-type: none"> ▪ Improved education to residents and ratepayers on sustainability and how Council can help protect the resources of the District.
Roading	<ul style="list-style-type: none"> ▪ Provision of safe infrastructure where people can move safely and freely to and from work, rest and recreation, in turn allowing for the provision of a safe future for Hauraki residents, ratepayers and visitors. ▪ Provision for social networking creating a desired social environment in which to live, and providing the infrastructure to enable working opportunities. ▪ Provision of silt and grease traps in stormwater drains alongside kerbs, helping to clean water before it reaches the river system.
Water	<ul style="list-style-type: none"> ▪ Complying with resource consents monitored by the Waikato Regional Council so Hauraki District Council is able to sustainably use allocated water within the District. In turn this ensures that there is sufficient water in the rivers to sustain river life and ecosystems that depend on it. ▪ In order to future proof the supply of water to the District Council is undertaking an analysis of groundwater aquifers in the Waitakaruru area in the hope that a source may be found which would take the pressure off the surface water sources. ▪ The provision of water allows for social well-being. People absolutely need water to survive, and therefore by providing this service Council is providing for a quality of life. ▪ By metering household water supply Council is able to assist the community to act sustainably through the ability to monitor their own consumption. It is hoped that metered water supplies reduce people's unnecessary use of water, as a user pays principle means that they will have to pay higher charges to do so.

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Water (cont...)	<ul style="list-style-type: none"> ▪ Council has policies for drought conditions which include the restriction of water use throughout the District. In the event of low water supply these policies enable the District to act in a sustainably accountable way, attempting to ensure that only essential water is used. In some cases pressure control is also used as a means of reducing water usage.
Wastewater	<ul style="list-style-type: none"> ▪ Waihi wastewater treatment plant cleans water to high standard before discharging into a rock diffuser to ensure a clean river is maintained for future generations. ▪ Endeavouring to clean water to the appropriate standards before discharging into rivers, in order to enhance cultural wellbeing (i.e. not polluting the water from which kai (food) is collected or gathered).
Land Drainage and Stormwater	<ul style="list-style-type: none"> ▪ Provision of stormwater detention ponds in Whiritoa and Waihi which allow stormwater pipes to operate at lower capacity when an event is occurring and disperse the water at a later time, through natural seepage or controlled flow. ▪ Providing land drainage, enabling the Plains to be farmed in a manner which provides both for today's generation and future generations. ▪ The use of berms (grass swales) to slow water down, trap sediment and reduce the volume of stormwater and sediment into rivers. ▪ Council controls 7km of tidal protection around Waitakaruru and Miranda. By protecting the area from the tide Council performs a sustainable practise, as it enables the continued habitation of them and farming practises.
Solid Waste	<ul style="list-style-type: none"> ▪ In 1992 a working party was formed called the Solid Waste Management Committee. This committee had representatives from Council, Waikato Regional Council, Federated Farmers, environmental groups and iwi. This committee was an advisory committee to Council which provided recommendations on the upgrading closure of the refuse tips and looked at future solid waste disposal options for the District. The responsibility of the committee was also extended to water and wastewater. The Consultative Committee for Water and Waste (as it is now named) has, since that time been fully involved with decisions on these issues. By ensuring that the future has been addressed Council has been able to plan for it in a sustainable manner.

Key Issues that affect more than one activity

The capital and renewal works for Network Services can be influenced by a number of factors outside the control of the Hauraki District Council. These factors include obtaining resource consents, tender prices, weather conditions, natural disasters, climate change, changes in community expectations and legislative requirements. Capital Works programmes show specific years for undertaking the work, but actual timing may vary as a result of any of the above factors.

Infrastructural Planning

The Community Outcomes process and the recent levels of service review identified the community's desire to ensure planning for infrastructure maintenance was kept at least to the present level of service and that renewal of assets and planning for growth in demand for infrastructural assets in the future was a priority.

Asset Valuations and Depreciation

Council must revalue its assets every three years to assess total network values and to recalculate depreciation based on those new values. Depreciation is an operating expense and must be funded. Depreciation is often referred to as the Decline in Service Potential (DISP) which is the wearing out of the asset. Alternatively it is the assets inability to continue to deliver service at its original levels.

There have been some significant increases in asset valuations as a result of the 2008 revaluation. The causes have been two-fold:

- New assets added to the valuation, being new work in the last financial year or assets not previously identified or valued.
- Cost increases in replacing assets over the three years between revaluations.

The annual depreciation or DISP amount has increased by the following approximate amounts:

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➤ Drainage	10%
➤ Roding	19%
➤ Wastewater	4%
➤ Water	16%
➤ Stormwater	17%

This has an impact on the total operating expenditure for each activity given DISP is an operating cost. Council is required to fully fund its operating costs so these increases in DISP have an impact on funding levels.

The potential rating impact of these increases, while not at the levels noted above, is still of concern.

The estimated impact on rating levels for these activities is:

➤ Drainage	2%
➤ Roding	12%
➤ Wastewater	1%
➤ Water	6%
➤ Stormwater	7%

The actual rates changes may be more or less than the figures noted above. The rates figures are dependent on a number of other factors beyond DISP.

Current Policies, Plans and Strategies

Infrastructural Asset Management Plans

Each year, two thirds of rate income is spent on maintaining, renewing or constructing Network Services. The investment made by ratepayers in the Network Services infrastructure was valued at over \$400 million as at 30 June 2008. This level of commitment clearly requires Council to ensure the planning for these services is done well into the future, which is why Asset Management Plans play a large role in forward planning.

These plans detail the systems in place for managing, monitoring and reporting on the performance of assets. The plans itemise and categorise assets and detail the maintenance renewal and capital expenditure programs over a 10 year period. They also identify levels of service, the supporting asset performance measurement issues and define areas where further information is required. Specific work programmes are identified in order to update

plans, strategies and documentation such as the Hauraki Community Plan. They address the lifecycle of the asset, the demands on the asset, the risks to the asset and how these risks will be mitigated. They are reviewed on an on-going basis to ensure that a sustainable development approach is taken, and that planning is as fully integrated as possible.

Asset Management Plans are working documents, which are continuously upgraded, reviewed and re-published three yearly. They incorporate identified Community Outcomes.

Council's Asset Management Plans for infrastructural assets also concentrate on asset maintenance and renewals to ensure that presently agreed levels of service and security can be maintained.

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Other plans and policies

The Network Services Group of Activities along with other Council Groups of Activities must work in conjunction with other Council plans, policies and strategies. These specifically include:

Type of Plan	Description and Objective
Operative District Plan	Provides a framework for the sustainable management of the natural and physical environment, and assists Council to carry out its functions in order to achieve the purpose of the Act.
Hauraki District Council Consolidated Bylaw	Provides laws applicable only to Hauraki District that in general protect the public from nuisance; protect, promote and maintain public health and safety; and minimise the potential for offensive behaviour in public places.
Assessment of Water and Sanitary Services	Comprises of an assessment on water supply, wastewater services, storm water, drainage, cemeteries, crematoria, public toilets and waste disposal. As required by section 125 of the Local Government Act 2002, there is a need to assess these services as they are vital to health and welfare.
Solid Waste Management Plan	A Plan for the effective and efficient management of solid waste in the District.
Development Contributions Policy	A Policy to provide predictability and certainty about the funding required to meet the increased demand for infrastructure and community facilities resulting from growth and new development in the Hauraki District by enabling Council to require the payment of development contributions.

Provision and funding of Network Services assets

Provision and lifecycle management

There are five major lifecycle stages associated with the provision of all infrastructural assets. These are categorised through the recognised life cycle approach as:

- Acquisition – The creation or addition of an asset due to the network requiring increased capacity or increased levels of service.
- Operation – The active process of utilising an asset which will consume resources such as manpower, energy, chemicals and materials. The costs attributable to this are part of the life cycle costs of the asset.
- Maintenance – The ongoing day to day work activity required to keep assets serviceable and to prevent premature deterioration or failure (but not replacement). This may be maintenance carried out in response to reported problems or defects (unplanned maintenance) or maintenance carried out

to a predetermined schedule (planned maintenance).

- Renewal and replacement – Works to upgrade, refurbish or replace existing facilities with facilities of equivalent capacity or performance capability, particularly an asset or part of an asset that has reached the end of its effective operational life.
- Disposal – The activity necessary to dispose of an asset that has been taken out of service (a decommissioned asset).

Capital Works

The Capital Works schedule in volume two details Capital Works and their drivers, whether they are demand/consumption, levels of service or renewals. Capital works by Ward are listed at the front of the plan in the 'Key Community Issues' section, and by activity throughout the plan.

Service Levels

Council measures and reviews service levels provided by its infrastructural assets through:

- Reviewing all legislative and consent requirements.
- Triennial community surveys.
- Submissions to Council.
- Monitoring of service requests, complaints and general consumer requirements.
- Monitoring of good practice through the development of Asset Management Plans.

In addition to these measures, in June 2008 Council conducted a thorough community consultation process to ascertain the community's satisfaction with current levels of service. This consultation consisted of a bus tour and workbook survey, community workshops held in the evening, and approaches to key stakeholder groups. With the results, Council were able to feel confident in the many levels of service already in place and to identify key areas where improvement was needed.

Service levels are also set by consent conditions, and legislation. These can alter from time to time, and Council must respond appropriately. Changes in Government legislation and regulations have less certainty but generally sufficient time is available to prepare and respond accordingly.

Forecasting models and assumptions also play a role in the service levels set. These projections help Council to forecast into the future, and therefore enabling the anticipation of additional services when required.

Demand/Consumption - changes

Growth projections for the Hauraki District Council (as detailed in the Future Council Strategies section of this Plan) indicate a 4% increase in population over the life of this plan, or 1.2% over the next three years. In addition the rateable unit growth within the District is projected to be 0.5% per annum over the next five years, changing to 1% per annum for the following five years. Generally, Council's infrastructural assets have sufficient capacity to cater for current levels of service and a

medium level of population growth without needing to provide significant additional capacity (except for aspects of water supplies and roading).

Council monitors the demand on, and the demand for its infrastructural service networks with:

- A programme of monitoring the performance of all infrastructural assets.
- Monitoring of demands on existing systems and networks.
- Regular consultation with the different classifications of users of assets.
- Triennial community surveys.
- Submissions to Council.
- Reviewing Council's Levels of Service.

Provision of additional asset capacity

As shown in the Network Services activity statements and itemised in the Capital Works schedule in Volume 2 of the Hauraki Community Plan, provision of additional asset capacity is provided by contracts awarded subject to Council's Purchase of Goods Policy 2004. All contracts over \$100,000 have to be awarded through a full Competitive Pricing Process (CPP). This system ensures that the most competitive tender from appropriately experienced contractors is accepted.

Council monitors and audits all contracts to ensure contractors are delivering the appropriate service.

Funding of additional asset capacity

The cost of creating additional asset capacity will usually be funded by borrowing. This form of funding is supplemented by the levying of Development Contributions. Development Contribution funding is typically in years after the initial expenditure as development gradually consumes the capacity available. The timing difference between the expenditure and development contributions is funded by borrowing. This borrowing is generally in the form of internal borrowing. (External borrowing is only done to manage Council's cashflow requirements).

Costs of servicing the loan (i.e. interest which is an operating cost), will be funded in accordance with Council's policy on funding operating expenditure for that activity, as detailed in Council's Revenue and Financing Policy.

In the case of subsidised roading expenditure, some capital expenditure may qualify for subsidy and this will be used to partially fund the additional capacity required.

Asset maintenance, renewal and replacement

Asset maintenance, renewal and replacement are subject to competitive tender (as detailed in Council's Purchase of Goods Policy) once they reach a certain cost threshold. This threshold is usually set at \$100,000, however other circumstances may be considered.

For maintenance purposes a number of longer-term contracts have been established in the areas of:

- Roothing maintenance
- Community road reserves maintenance
- Repairs and maintenance to infrastructural networks

Other network maintenance contracts are let on an individual or annual basis. Examples include:

- Roothing reseals
- Road marking
- Drain and canal spraying
- Sign maintenance
- Sport fields' spraying and turf maintenance

Funding of renewals and operational / maintenance expenses

Renewals:

- The funding of renewal or replacement of assets will generally be by way of internal borrowing. In the case of subsidised roading expenditure, or other subsidised renewal expenditure, (e.g. reseals) these may be eligible for subsidy which would be used to partially fund the renewal of the asset. The balance would be funded by way of internal borrowing. Interest cost associated with any borrowings is an operational cost and will be funded according to the operational funding as per the Revenue and Financing Policy for that activity.

Operational/maintenance expenses

- Maintenance costs are funded according to Council's Revenue and Financing Policy. Generally this requires that maintenance is funded by way of
 - grants or subsidies,
 - fees and charges or
 - general or targeted rates
- Generally the operating expenditure in any year will be funded by the income for that particular year. However Council may make exceptions to this, where a long-life asset/activity's past or future years' surpluses may be used to offset deficit funding in any one year or group of years. This is usually done where there is a spike in expenditure or a sudden change in levels of expenditure and Council considers that the deficit funding in any year will not compromise the ongoing operational effectiveness of the assets used in the activity or lead to changes in level of service.

What are the significant positive and negative effects?

Where possible, Council is already addressing the negative effects associated with the provision of services. The column showing how Council remedies the negative effects includes the current methods Council is using, and does not list all of the options available to Council.

Network Services Group activities	Positive	Negative	How do we remedy these negative effects?
All activities	<ul style="list-style-type: none"> Provides a basis for health, comfort and safety and allows for the proper functioning of communities. 	<ul style="list-style-type: none"> Cost of compliance with standards. Major expenditure required to maintain infrastructure. There can be conflict between use of the resource and cultural values. 	<ul style="list-style-type: none"> Council operates a Competitive Pricing Policy for which tender applications are sought with the lowest tender taken in most cases. Council attempts to mitigate issues on a one by one basis.
Roading	<ul style="list-style-type: none"> Strong contribution to social and economic well-beings. Prime network for the movement of people and goods. 	<ul style="list-style-type: none"> During construction physical works will generate dust, noise, vibration and inconvenience by delays to travel times. Pollutants and sediments wash off roads into the neighbouring ecosystems. Poor design and use can result in dangers to people. 	<ul style="list-style-type: none"> Swales and berms in place (in some areas) to help remedy these issues. Design standards are used for new roads.
Water	<ul style="list-style-type: none"> Better control over water extraction. All consumers are metered. Systems installed underground for public safety and visual enhancement. Recreational uses of the water supply network. 	<ul style="list-style-type: none"> Finite supply of water. High extraction rates. Water treatment system components can contain health risks. Expectations regarding free water. 	<ul style="list-style-type: none"> Council complies with resource consents granted by the Waikato Regional Council. Council is investigating alternative sources i.e. groundwater. Council are planning a comprehensive demand management strategy to minimise use. Leak reduction and waste reduction efforts in place
Wastewater	<ul style="list-style-type: none"> Systems installed underground for public safety and visual enhancement. Treatment processes mitigate health concerns. Increased efficient treatment processes resulting in cleaner effluent discharge to the environment. Relatively low cost for public convenience. Rivers are now cleaner. 	<ul style="list-style-type: none"> Negative effects such as spills could occur as a result of non-compliance with consent conditions, or natural disasters. Possible overflows in rain events resulting in contamination of Stormwater systems. Possible overflows from reticulation systems. 	<ul style="list-style-type: none"> Improving remote monitoring of all sites. Undertaking flow monitoring and network modelling to reduce the likelihood of an incident.

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Network Services Group activities	Positive	Negative	How do we remedy these negative effects?
Land drainage	<ul style="list-style-type: none"> ▪ Reduced flooding risk. ▪ Helps create viable, healthy land. ▪ Sustainable farming. 	<ul style="list-style-type: none"> ▪ Intensive farming negates diversity options. ▪ Some productive land lost to drainage channels. ▪ Potential pollution from fertiliser runoff and chemical sprays. ▪ Loss of natural wetland habitat. ▪ Peat shrinkage and lowering of water table. 	<ul style="list-style-type: none"> ▪ Observing and monitoring.
Stormwater	<ul style="list-style-type: none"> ▪ Keeps properties dry. ▪ Assists in preventing flooding. 	<ul style="list-style-type: none"> ▪ May initiate erosion at outfalls. ▪ Possible wastewater cross-contamination. ▪ Stormwater runoff from roads and land contains contaminants and sediments which eventually reach waterways, potentially affecting water quality. 	<ul style="list-style-type: none"> ▪ Construction of erosion prevention devices (energy dissipation). ▪ Pre-treatment such as swales and berms where possible. Kerb sumps are also maintained.
Solid Waste	<ul style="list-style-type: none"> ▪ Keeping reusable waste out of landfills. ▪ Reduction of the quantity of leachate produced at landfills. ▪ Recovery creates an income from the waste rather than a cost for disposal. ▪ Attitudes are changing from 'throw away' to 'reduce, re-use and recycle'. ▪ Utilising methane production for power. 	<ul style="list-style-type: none"> ▪ Landfills are still producing leachate which is becoming increasingly difficult to treat or dispose of. ▪ The cost of reusing some materials is greater than using the raw material. ▪ Littering still occurs. ▪ Requires long term monitoring and control. 	<ul style="list-style-type: none"> ▪ Ensuring that contracts with landfill providers are sustainable. ▪ Monitoring and compliance of resource consents for Council-owned landfills.

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What are the costs of operating the Network Services Group?

	Forecast 2009-10 \$000's	Forecast 2010-11 \$000's	Forecast 2011-12 \$000's	Forecast 2012-13 \$000's	Forecast 2013-14 \$000's	Forecast 2014-15 \$000's	Forecast 2015-16 \$000's	Forecast 2016-17 \$000's	Forecast 2017-18 \$000's	Forecast 2018-19 \$000's
OPERATING EXPENDITURE										
Roading	6,471	6,842	7,315	7,519	7,676	8,073	8,259	8,495	8,908	9,140
Water	4,698	6,014	6,804	6,965	7,547	8,225	8,196	8,158	8,401	8,344
Wastewater	3,458	3,603	3,883	3,986	4,039	4,162	4,157	4,145	4,247	4,281
Land Drainage	1,039	1,063	1,117	1,119	1,121	1,149	1,140	1,134	1,169	1,150
Stormwater	811	836	884	890	904	951	955	958	1,023	1,023
Solid Waste	1,150	1,194	1,241	1,186	1,174	1,212	1,232	1,264	1,298	1,305
	17,627	19,552	21,244	21,665	22,461	23,772	23,939	24,154	25,046	25,243
LESS OPERATING REVENUE										
Fees and Charges	659	685	704	721	736	752	769	787	806	826
External Subsidies	6,416	3,513	3,747	3,898	3,918	3,925	3,980	4,173	4,321	4,409
Targeted Rates	9,895	10,646	11,506	12,415	13,227	14,155	15,050	15,955	16,918	17,836
General Rates	1,850	1,845	2,188	2,096	2,029	2,108	2,105	2,137	2,295	2,318
	18,820	16,689	18,145	19,130	19,910	20,940	21,904	23,052	24,340	25,389
OPERATING SURPLUS/(DEFICIT)	1,193	(2,863)	(3,099)	(2,535)	(2,551)	(2,832)	(2,035)	(1,102)	(706)	146
FUNDED BY										
Transfers to/(from) Water Reserve	(20)	(823)	(1,090)	(641)	(698)	(848)	(289)	274	555	1,137
Transfers to/(from) Wastewater Reserve	(638)	(588)	(614)	(457)	(246)	(44)	295	648	895	1,219
Transfers to/(from) Land Drainage Reserves	173	162	121	133	145	131	154	175	157	192
Transfers to/(from) Stormwater Reserves	8	2	(3)	5	7	-	-	7	(11)	(5)
Transfers to/(from) General Reserve	3,253	205	201	238	188	(2)	(34)	31	(20)	(55)
Other General Funding	(1,583)	(1,821)	(1,714)	(1,813)	(1,947)	(2,069)	(2,161)	(2,237)	(2,282)	(2,342)
	1,193	(2,863)	(3,099)	(2,535)	(2,551)	(2,832)	(2,035)	(1,102)	(706)	146
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	8,133	4,602	4,420	5,160	4,420	4,661	4,193	4,387	4,975	4,867
Level of Service Increases	6,661	4,008	3,223	4,328	9,528	1,993	1,838	1,751	2,107	1,993
Capacity Demand Increases	8,167	4,792	121	13	1,375	14	14	14	15	15
	22,961	13,402	7,764	9,501	15,323	6,668	6,045	6,152	7,097	6,875
Internal/External Loan Repayments	269	0	301	163	614	1694	3295	4319	4712	5810
Landfill Liability Reductions	0	279	80	137	85	87	0	0	0	0
CAPITAL FUNDING REQUIRED	23,230	13,681	8,145	9,801	16,022	8,449	9,340	10,471	11,809	12,685
FUNDED BY										
Depreciation	6,224	6,525	7,397	7,481	7,584	8,488	8,558	8,604	9,491	9,555
Development Contributions	238	238	238	238	238	477	477	477	477	477
Internal/External Borrowing	13,796	7,214	1,370	2,124	8,209	-	-	-	-	-
Transfers from/(to) Community Facilities Reserves	(145)	(117)	(110)	(107)	(106)	(104)	(101)	(97)	(94)	(91)
Transfers from/(to) Water Reserve	(20)	(823)	(1,090)	(641)	(698)	(848)	(289)	274	555	1,137
Transfers from/(to) Wastewater Reserve	(638)	(588)	(614)	(457)	(246)	(44)	295	648	895	1,219
Transfers from/(to) Land Drainage Reserves	173	162	121	133	145	131	154	175	157	192
Transfers from/(to) Stormwater Reserves	8	2	(3)	5	7	-	-	7	(11)	(5)
Transfers from General Reserve	3,594	1,068	836	1,025	889	349	246	383	339	201
	23,230	13,681	8,145	9,801	16,022	8,449	9,340	10,471	11,809	12,685

Roading Services

What is the 'Roothing' activity?

Council provides a network of local roads throughout the District that are developed, maintained and managed along with their associated services. This includes sealed and unsealed roads and the associated road markings, as well as activities outside the trafficable road surfaces such as footpaths, kerb and channel, culverts, street and road signs, traffic islands, retaining walls, stormwater disposal, safety railings, bridges, street and amenity lighting and stock underpasses.

Hauraki District Council only manages the local roads, as major through routes are designated State Highways and are owned and managed by the New Zealand Transport Agency (NZTA).



Balancing of well-beings

The Sustainability Tuner

Score	Economic	Environmental	Social	Cultural
5				
4				
3				
2				
1				
0				
-1				
-2				
-3				
-4				
-5				

Please see page 88 for an explanation of how to use the sustainability tuner and appendix 8 which explains the criteria.

How does Council provide this activity?

For the Roothing activity, the overriding transport legislation is the Land Transport Management Act 2003 (LTMA). The Roothing activity also has a number of other policies and plans to which it has a relationship, including the New Zealand Transport Strategy, the Government Policy Statement for Transport, the Regional Land Transport Strategy and internally, the Transportation Asset Management Plan. Through these documents, there are targets that have been developed. Council has taken steps to align its actions with these documents and expects to continue to do so in the future.

Council undertakes the Roothing activity to a set of agreed standards, utilising a combination of annual and 3-5 year term contracts. Contract structures vary depending on the service being provided and these range from maintenance of street signs, through to major pavement rehabilitation.

QUICK FACTS

Did you Know?

Council Assets

As of April 2008, within Hauraki District Council there are 136 bridges, 102km of footpaths, 2600 road signs, 1700 streetlights, 112.7km of unsealed roads and 480.6km of sealed roads.



Section 12 of the Land Transport Management Act 2003 states that every road controlling authority (such as a Council) has an obligation to prepare a three year Land Transport Programme. Council has prepared the programme for 2009/12 and this has been submitted for prioritisation to Environment Waikato. The programme will be confirmed by Environment Waikato following Council's adoption of this Plan.

Council, in preparing its Land Transport programme, has taken into account how each activity and activity class in the Land Transport Programme:

- Assists economic development.
- Assists safety and personal security.
- Improves access and mobility.
- Protects and promotes public health.
- Ensures environmental sustainability.

In preparing its draft Land Transport Programme, Council has taken into account the current National Land Transport Strategy, the National Energy Efficiency and Conservation Strategy, and Regional Land Transport Strategy and Regional Land Transport Plan.

Road Safety

As part of the Land Transport Programme, Council works in partnership with the New Zealand Transport Agency, the New Zealand Police and neighbouring local authorities to reduce the number and severity of accidents in the Hauraki District. This is in response to community expectations and the need for Council to provide a governance and leadership role.

The Government provides funds for road safety initiatives that can be used in the District by Council in a facilitator role. This activity provides for the delivery, coordination and facilitation of road safety programmes and initiatives in the District. Council employs a full time Road Safety Coordinator in conjunction with Thames Coromandel and Matamata-Piako District Councils to coordinate, facilitate and manage sub-regional and local efforts to address identified road safety problems.

Council has developed a Safety Management System and District Road Safety Strategy.

These outline key issues in terms of road safety in the District, who can be involved, and how. This involves community groups, Government agencies and Environment Waikato. Council is now in the process of implementing the strategy and system.

Outside Funding

Funding of Roothing is divided into two categories:

Subsidised Works

These works consist of maintenance upgrading and renewal of carriageway assets including roads, bridges, drainage, culverts, road marking, lighting and signage.

The programme for subsidised work is agreed with New Zealand Transport Agency which administers Government subsidy payments. The current subsidy rate is 54% for maintenance and 64% for new construction.

Non-Subsidised Works

Generally these are works outside the scope of the Government subsidy that Council and the community agree to undertake. They include seal extensions, some kerb and channelling, street cleaning, new and replacement footpaths, maintenance of car parks and walkways connecting local roads.

The level of non-subsidised works to be undertaken each year is agreed with Council's Ward Committees triennially, prior to the release of the Hauraki Community Plan.

Operation

Council has three major tendered contracts that cover a basic three year term, which can be extended to five years pending acceptable performance. The contracts are for:

- Road maintenance (including pavement marking and signage) - expires 30th June 2012.
- Street light maintenance - expires 30th June 2012.
- Roothing Professional services - expires 30th June 2011.

Network Services Group

Roading Services

Each year Council award may individual annual contracts for:

- Reseals
- Reconstruction
- Area wide pavement treatments
- Minor safety improvements

Capital Works may be grouped on a geographical basis where this could provide more attractive work packages.

Public Transport

Council continues to pay a levy to Environment Waikato for the provision of public transport, as agreed in the Regional Land Transport Plan. This levy is anticipated to continue for the life of this Plan.

Walking the Talk

On Sustainability

Komata Reefs Road

Recent culvert extensions along Komata Reefs Road used new sustainable criteria in order to ensure a reduction of impacts on the environment. By using decision-making tools at a design stage the work was able to promote:

- a) reduced sediment and silt into the river
- b) preservation of the quality of river water
- c) aquatic life / ecology

Council's roading contractors currently use a set of criteria in order to make decisions on roading which are aimed at substantially decreasing the impact of the road on the surrounding environment.

QUICK FACTS

Did you Know?

New Zealand Transport Agency

The NZ Transport Agency (NZTA) is a Crown entity that was established on 1 August 2008, bringing together the functions of Land Transport New Zealand and Transit New Zealand to provide an integrated approach to transport planning, funding and delivery.

The NZ Transport Agency contributes to an integrated, safe, responsive and sustainable land transport system, in support of the updated New Zealand Transport Strategy. It works in partnership with regional and local authorities, the transport industry and communities to achieve this. The NZ Transport Agency is focused on delivering four key outcomes:

- Integration
- Safety
- Sustainability
- Value for money

The New Zealand Transport Agency is responsible for Crown revenue of \$2.8 billion, allocation of \$2.0 billion and an operating budget of approximately \$240 million.

Network Services Group

Roading Services

Current Levels of Service and how Council will measure them?

Current Levels of Service	Baseline 2007/08	Target 2009/10	Target 2010/11	Target 2011/12	2012-19
<p>Provide access to the network of local roads</p> <p><u>Measure and method of measurement</u> Time for road access to be restored to communities following a 1 in 10 year climatic event, as measured by the network consultant.</p>	No 1 in 10 year storm events in 2007/08	100% of Arterial and Collector roads providing access to communities open within 24 hours. All other roads 72 hours.			
<p>Extend pavement life of sealed roads</p> <p><u>Measure and method of measurement</u> Reseal an average of 40 km of sealed roads per year over a three year rolling average, as measured by the network consultant.</p>	43km	40kms of roads sealed over three year rolling average.			
<p>Delivery of a roading network that addresses safety and amenity issues</p> <p><u>Measure and method of measurement</u> Traffic safety barriers are installed and maintained in effective conditions with NZ Standards, as measured by the network consultant.</p>	New measure	100% of all roads.			
<p><u>Measure and method of measurement</u> Damage, missing or leaning signs are remedied, as measured by the network consultant.</p>	New measure	Within 7 days.			
<p><u>Measure and method of measurement</u> All reported potholes are repaired, as measured by the network consultant.</p>	New measure	Within 5 days.			
<p><u>Measure and method of measurement</u> All programmed new footpaths are installed, as measured by the network consultant.</p>	New measure	100% of all footpaths installed			
<p>Contribution to Community Outcomes</p> <ul style="list-style-type: none"> Management of our natural and physical environment in a sustainable manner. Long term planning, ensures that our future infrastructure requirements meet the growth and development opportunities of our District. 					

Possible impacts on Levels of Service

Current Levels of Service	Possible impacts on Levels of Service:
Provide access to the network of local roads	<p>New Zealand Transport Agency reviews the level of subsidy it pays each year. The level has not varied by more than one 1% in the last five years. If a change were to be made it could lead to a need for Council to review its works programmes accordingly. The priority for subsidy funding of roading projects is determined by:</p> <ul style="list-style-type: none"> ▪ A formula for benefit/cost that is applied nationally. ▪ Contribution to strategic objectives of the Land Transport Management Act 2003. ▪ Priorities within national, regional and local land transport plans. Considerations could include safety, congestion, sustainability, benefit/cost ratio, grouping of projects. <p>Changes in contracts have the potential to change contract prices and consequently may affect the estimates for Capital Works</p> <p>Individual communities fund a number of unsubsidised works. The level of funding committed by the communities determines the extent of works to be undertaken that have been signalled in this plan.</p>
Extend pavement life of sealed roads	<p>Seal extensions are a significant discretionary activity for the Council, and Council may from time to time reconsider the amount allocated to this activity.</p> <p>Investigation has shown that over 5% (64km) of the sealed roading network is under-width by more than 1.0 metre. Funding for this has not been allocated, and it is expected that road widening will take place in conjunction with road rehabilitation. However, if significant economic and cost implications exist, Council may depart from the standard if the reasons are seen to be valid and supported.</p> <p>There could be changes in the freight modes travelling on the District roads. This may affect the pavement life of sealed roads.</p>
Delivery of a roading network that addresses safety and amenity issues	<p>Through the Walking and Cycling Strategy and changing societal trends, there could be greater community demand on the opportunities available in the District for footpaths and for cycle lanes.</p> <p>Initiatives taking place at a regional level, or local community demand may see changes in the public transport availability in the District.</p>

Demand Management

The Hauraki District Council Roothing network is currently under some pressure from increasing demands.

Due to Hauraki District's central position between Auckland, Waikato and Bay of Plenty regions; traffic volumes on arterials and collector roads are increasing. The ongoing demand for improvements in the levels of service is also a key community driver.

The implication of this demand on the Roothing networks is fourfold; an increased rate of deterioration on roads and pavements; an increasing focus on road safety; the need for increased levels of expenditure; associated costs being met by a relatively small rating income source.

There is the potential for increased demand by walking and cycling assets, in light of the walking and cycling strategy to be developed in 2009/10. Sustainable principles and awareness could also increase the need for cycle lanes or pathways.

Programmed actions for 2009-19

Council has long-term maintenance, renewal and capital expenditure strategies in place for both subsidised and non-subsidised roading works, which are reviewed on a regular basis as part of the Roothing asset management programme.

Council is seeking opportunities for alliance/partnership with New Zealand Transport Agency and neighbouring local authorities to deliver roading services.

There is a hierarchy of Land Transport Plans required by the Land Transport Management Act 2003 which seek to implement the goals established in the National Land Transport Plan. They are:

- National Land Transport Plan
- Regional Land Transport Plan
- District Land Transport Plan

These plans co-ordinate the involvement of all agencies involved in land transport.

The current focus is on safety and a reduction in the road toll through:

- Education
- Engineering
- Enforcement

A draft Walking and Cycling Strategy is also in the process of being prepared which, once adopted, may impact on the Roothing activity level of service. The draft Walking and Cycling Strategy will be presented for consultation once available.

2008 drought damage

Between January and April 2008, Council's roading network, particularly in the Hauraki Plains, sustained considerable damage in what was the worst ever drought recorded in the Waikato.

The unforeseen expenditure that is now required is significant and has been estimated at over \$4,000,000. The repairs are necessary to ensure restoration of roads to a standard similar to what existed before the damage

occurred. The majority of the damage restricts the use of traffic lane(s) and in many instances requires urgent attention in order to remove threats to the safety of road user.

There are 59 roads on the Hauraki Plains which are damaged resulting in 91,000 square metres of pavement damage. The affected areas have been prioritised and of these, 41,600 square metres are considered to be the worst affected roads and therefore the highest priority and to be reinstated first. An additional 29,800 square metres are the second highest priority and a further 19,600 square metres are third highest.

Council is required to repair the roads affected by the drought. Expenditure of over \$500,000 has already been spent on the highest priority works in 2008/09; however there is an outstanding \$3,500,000 of work that needs to be carried out. Council will be carrying out the remainder of this reinstatement in 2009/10. By pursuing this option, rather than spreading the cost over the life of the Plan Council will be able to qualify for a higher than normal subsidy (61% rather than 54% for 2008/09 and 88% rather than the normal 54% for 2009/10) if the reinstatement is completed within two years of the event, if the New Zealand Transport Agency approves.

Although not a direct result of climate change, the natural weather events of 2008 were an appropriate insight into possible future weather patterns in the Hauraki District. If climate change scenarios are proven correct, Hauraki District will be more prone to droughts in the future with resulting damage. Please refer to the 'Key Community Issues' section of this plan on page 17 for further information regarding predicted future climates.

Public Transport

Council continues to pay a levy to Environment Waikato for the provision of public transport, of \$19,000, which is anticipated to continue for the life of this Plan. A further \$12,000 has been allowed, for a coordinator to establish local transport initiatives utilising locally owned and operated vehicles. The project is hoped to take a community based approach making better use of vans currently used by health and hospitality organisations.

Network Services Group

Roading Services

Capital Works Schedule

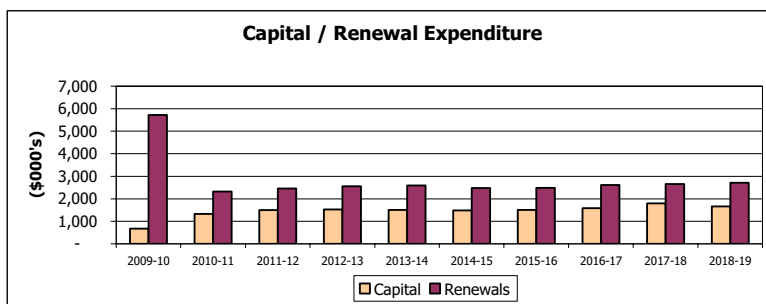
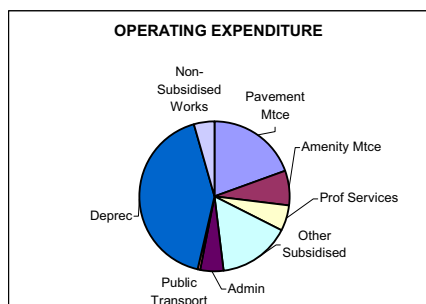
Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Subsidised roading				
Resurfacing Continuation of ongoing resurfacing programme.	1,331	1,441	1,558	11,202
Emergency reinstatement To address pavement rehabilitation and to seal damaged parts of roading network	3,498	-	-	-
Drainage renewals To address poorly deteriorating sections of drainage that may reduce the pavement life.	170	174	148	1,143
Kerb and channel To address poorly deteriorating sections of drainage that may reduce the pavement life.	175	69	119	415
Area wide pavement treatment To substitute pavement where it is more economic than repairing minor defects.	535	501	539	4,130
Bridge repairs	44	46	47	364
Streetlights	113	118	123	961
Minor improvements	257	260	277	2,112
Walking and cycling works Budget to implement Walk and Cycling Strategy once adopted.	86	80	89	700
Seal extensions To provide sections of sealed road where it is more economic than leaving as an unsealed road.	-	94	141	984
Non subsidised roading				
Seal extensions To provide sections of sealed road where it is more economic than leaving as an unsealed road.	-	366	411	3,360
Kerb and channel To address poorly deteriorating sections of drainage that may reduce the pavement life.	-	305	297	2,223
New vehicle crossings	12	12	12	94
New street lights	9	9	10	74
Stock underpass subsidies	-	-	-	-
Plains unallocated works	50	52	54	412
Footpath replacements To replace poorly deteriorating sections of the footpath that will likely to affect safety or access.	34	35	37	280
Footpaths additional To create safe passages for pedestrians based on the Draft Walking and Cycling Strategy	73	75	78	596
Vehicle crossings	12	12	13	98

Network Services Group

Roading Services

What is the cost of operating the Roothing activity?

	Forecast 2009-10 \$000's	Forecast 2010-11 \$000's	Forecast 2011-12 \$000's	Forecast 2012-13 \$000's	Forecast 2013-14 \$000's	Forecast 2014-15 \$000's	Forecast 2015-16 \$000's	Forecast 2016-17 \$000's	Forecast 2017-18 \$000's	Forecast 2018-19 \$000's
OPERATING EXPENDITURE										
Pavement Maintenance	1,257	1,322	1,388	1,445	1,476	1,529	1,609	1,669	1,718	1,796
Amenity Maintenance	487	557	576	591	605	619	634	650	666	682
Professional Services	398	383	411	427	438	447	458	468	480	491
Other Subsidised	875	1,090	1,120	1,173	1,210	1,248	1,260	1,346	1,355	1,404
Administration	368	373	380	384	389	405	409	421	436	445
Public Transport	31	32	33	34	35	35	36	37	38	39
Depreciation	2,727	2,755	3,069	3,119	3,170	3,428	3,483	3,525	3,827	3,886
Non-Subsidised Works	328	330	338	346	353	362	370	379	388	397
	6,471	6,842	7,315	7,519	7,676	8,073	8,259	8,495	8,908	9,140
LESS OPERATING REVENUE										
External Subsidies	6,364	3,459	3,692	3,842	3,860	3,866	3,920	4,111	4,258	4,344
Targeted Rates	460	472	501	511	521	546	557	569	596	609
General Rates	1,314	1,298	1,606	1,595	1,532	1,593	1,583	1,613	1,750	1,794
	8,138	5,229	5,799	5,948	5,913	6,005	6,060	6,293	6,604	6,747
OPERATING SURPLUS/(DEFICIT)	1,667	(1,613)	(1,516)	(1,571)	(1,763)	(2,068)	(2,199)	(2,202)	(2,304)	(2,393)
FUNDED BY										
Transfers to/(from) General Reserve	3,250	208	198	242	184	1	(38)	35	(22)	(51)
Other General Funding *	(1,583)	(1,821)	(1,714)	(1,813)	(1,947)	(2,069)	(2,161)	(2,237)	(2,282)	(2,342)
	1,667	(1,613)	(1,516)	(1,571)	(1,763)	(2,068)	(2,199)	(2,202)	(2,304)	(2,393)
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	5,725	2,315	2,452	2,559	2,589	2,471	2,486	2,609	2,654	2,712
Level of Service Increases	662	1,322	1,488	1,517	1,493	1,471	1,499	1,562	1,780	1,648
Capacity Demand Increases	12	12	13	13	13	14	14	14	15	15
CAPITAL FUNDING REQUIRED	6,399	3,649	3,953	4,089	4,095	3,956	3,999	4,185	4,449	4,375
FUNDED BY										
Depreciation	2,727	2,755	3,069	3,119	3,170	3,428	3,483	3,525	3,827	3,886
Development Contributions	140	140	140	140	140	280	280	280	280	280
Transfers from/(to) Community Facilities Reserves	(145)	(117)	(110)	(107)	(106)	(104)	(101)	(97)	(94)	(91)
Transfers from General Reserve	3,677	871	854	937	891	352	337	477	436	300
	6,399	3,649	3,953	4,089	4,095	3,956	3,999	4,185	4,449	4,375



Water Supply Services

What is the Water Supply activity?

The water supply activity is about the provision of potable water to the Hauraki Community.

Hauraki District Council owns and operates eight water supply networks that service the main urban communities of Paeroa, Waihi and Ngatea, the smaller communities of Karangahake, Ohinemuri, Kaimanawa, Mackaytown, Waikino, Kerepehi, Waitakaruru and Turua, and the rural areas of the Hauraki Plains. Council's role is to provide reticulated water supply to these areas.

Approximately 2,700 people obtain domestic water from rainwater tanks and private bores. Council is also aware of some small reticulated supplies serving a variety of schools, clubs and industrial premises.

Balancing of well-beings

The Sustainability Tuner

Score	Economic	Environmental	Social	Cultural
5				
4				
3				
2				
1				
0				
-1				
-2				
-3				
-4				
-5				

Please see page 88 for an explanation of how to use the sustainability tuner and appendix 8 which explains the criteria.

How does Council provide this activity?

Council is primarily involved in the Water Supply activity as potable water is a basic necessity of life. Council has an obligation under various legislation to identify where potable water supplies are required, and either provide the supplies directly or maintain an overview of supplies which may be provided by others.

In the Hauraki District, water is collected from streams and rivers, and is treated and reticulated to eight public water supply systems throughout the District. These eight water supply systems provide potable metered supply of water to 6,803 properties (as at September 2008) to consumers in the Kaimanawa, Karangahake, Mackaytown, Plains, Ohinemuri, Paeroa, Kerepehi, Ngatea, Turua, Waitakaruru, Waihi and Waikino communities.

For the Hauraki District, water supply is not only an obvious necessity for residents to consume in their everyday lives, but it is also critically important for the prominent local dairy industry.

The Plains water supply exemplifies the diverse nature of the water supply systems throughout the Hauraki District. This system covers an area of 33,000 hectares and is used mainly for farm stock watering and dairy shed use, as well as serving a population of approximately 5,000 people in the townships of Ngatea, Waitakaruru, Kerepehi, Turua and the Huirau area.

The Levels of Service for water supplies has been developed considering a range of community expectations, legislative requirements, sustainable environmental and health outcomes and affordability. Internally,

the primary driver for the management of the water asset is through the Asset Management Plan. In terms of an enforcement sense, it is supported by Part 5 of the Hauraki Consolidated Bylaw, which regulates for the protection of the water supply, the conditions of supply of water by the Council, and the provision of water supply through schedules of standards for connection to the water supply system.

Council has a committee in place called the Consultative Committee for Water and Waste. This committee was established to appropriately enable consultation with special interest groups regarding important water and waste issues. This advisory committee provides recommendations to Council made in conjunction with a number of participating community and stakeholder groups such as Federated Farmers, local Iwi and Forest and Bird Society etc.

Legally, Council is required to act:

- When potential health risks of water supplies (whether private or public) are identified.
- To ensure that all inhabited buildings have safe and adequate water supplies.
- To ensure that fire hydrants are installed in the reticulated areas and that they are supplied at a sufficient pressure.

Council must monitor the ongoing sufficiency, effectiveness and efficiency of the water supply system including taking steps to ensure that adequate fire hydrants are provided and that they are properly maintained.

Walking the Talk

On Sustainability

Aquifer Bores for Hauraki Plains?

Many of the current resource consents issued by the Regional Council are unlikely to be renewed at current service levels due to new sustainability targets and added pressures from other demands. As a result, Council has been considering previously unexplored options to supply the Plains with water, of which aquifers lying under the western hills of the Hauraki District have been a strong contender.

If Council finds the results of a desk-top study into the boring of aquifers to be a viable option then test bore holes will be sunk, in the hope of finding a suitable resource for Hauraki District.

The value to the District of using aquifers is that they provide a sustainable and cheap alternative to that of surface water supplies. Bore water is usually cheaper to supply due to the high quality of the water in the aquifer, meaning very little treatment is needed to meet the new New Zealand Water Standards. There is a risk that elevated levels of Iron and Manganese will be found in aquifers (as it is in the current shallow aquifers used), however it is believed that the risk is reduced, the deeper the aquifer is in the area of interest.

If managed properly, ground water supplies can last for many years and the cost of pumping and piping the water will in time be mitigated by the reduction in effort needed to clean and treat it.

Council considers that if this option was to proceed, it would provide a safe and sustainable water supply for Hauraki.

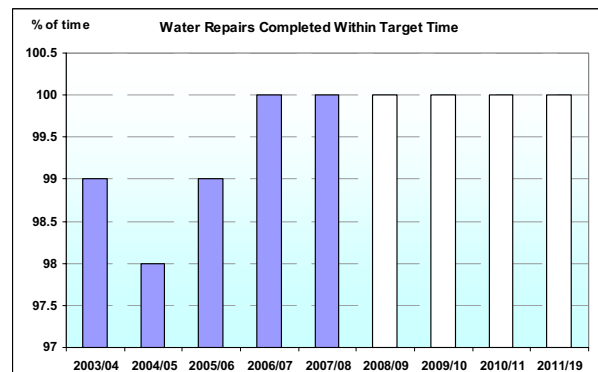
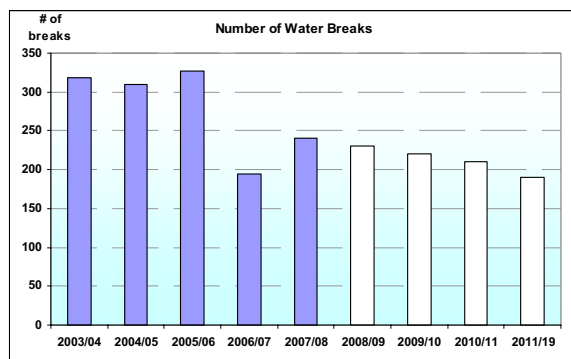
Network Services Group

Water Supply Services

Current Levels of Service and how Council will measure them

Current Levels of Service	Baseline 2007/08	Target 2009/10	Target 2010/11	Target 2011/12	2012-19
Water from all water supplies is safe to drink <u>Measure and method of measurement</u> Number of notifiable illnesses attributable to the management of water supply services, as measured through Council health and safety records, as advised by Ministry of Health.	0			0	
Water supply services are affordable <u>Measure and method of measurement:</u> Average water supply charges per cubic metre, as measured through Councils financial systems.	Rural \$0.78 – \$0.88 Urban \$0.88	Rural \$0.88 – \$0.99 Urban \$1.16	Rural \$1 – \$1.11 Urban \$1.28	Rural \$1.12 – \$1.23 Urban \$1.40	Rural \$1.24 – \$1.35 Urban \$1.52
Water supply failures and service requests responded to promptly <u>Measure and method of measurement</u> Percentage of urgent service requests responded to within 4 hours as measured by the service request database.	60%			>90%	
A reliable water supply is provided <u>Measure and method of measurement</u> Number of water supply disruptions to properties per annum, as measured through the water supply performance reports.	211			<270	
<u>Measure and method of measurement</u> Percentage of customers satisfied or very satisfied with the water supply services, as measured by Council's triennial survey.	61%		>68%		>72%
Contribution to Community Outcomes					
<ul style="list-style-type: none"> Management of our natural and physical environment in a sustainable manner. Long term planning, ensures that our future infrastructure requirements meet the growth and development opportunities of our District. 					

The following tables illustrate projected change to district-wide water supply demand and service level requirements over the next three years.



Network Services Group

Water Supply Services

Possible impacts on Levels of Service

Current Levels of Service	Possible impacts on Levels of Service:
Water from all water supplies is safe to drink	<p>There is the potential that groundwater resources in the western hills of the Hauraki District may be available for use. Investigation needs to take place to assess the viability of this possibility before any decision could be made to utilise this groundwater.</p> <p>Once Council's water supplies are graded by the Ministry of Health, Council may need to reassess the Capital Works Programme for the water supply activity. The water supply plants will not currently meet the requirements of the revised standards and need capital work to maintain or improve their grading. This has been programmed, however, due to the extensive program of capital works, there may need to be further consideration of the plant upgrades during the life of this plan.</p> <p>The Local Government Act 2002 requires that a review of the Assessment of Water and Sanitary Services shall be carried out from "time to time". This was first carried out in 2005.</p> <p>The next Assessment of Water and Sanitary Services review is expected to take place prior to the Hauraki Community Plan 2012-22. Depending on the outcome of this review there may be a need to consider the provision of some water and sanitary services that are not currently provided.</p>
Water supply services are affordable	<p>There may be opportunities in the future to combine some water supply operations on the District's boundaries with neighbouring authorities. If this is an option, following investigation, further consultation will take place with the affected communities.</p>
Water supply failures and service requests responded to promptly	<p>Extreme weather events can reduce the response time of some service requests due to the excessive numbers and extent of particular events.</p>
A reliable water supply is provided	<p>Council has sufficient access to source water for current demand, but it is not necessarily accessible to the areas requiring it. Storage of treated water will be needed to ensure that demand can be met.</p> <p>The long-term strategy for smaller supplies is to provide their requirements from higher quality supplies from larger water treatment plants with higher capacity water sources. Ohinemuri, Karangahake and Mackaytown will be served by the Paeroa Water Treatment Plant. Waikino Township will be linked to the Waihi supply.</p> <p>Improvements to water supply services to meet more stringent new standards are planned and programmed and a renewal strategy is being developed. Actual timing of the expenditure may vary from the programme to take account of statutory time requirements. The short term renewal of some resource consents may be necessary to achieve capital expenditure timing benefits.</p> <p>Intensified farming practices and farm amalgamations are expected to raise the future demand for water throughout the District. Dairy farmers are required to meet the Ministry of Agriculture and Fisheries D106 standard for Dairy Farm Shed Water Supplies, which gives rise to a requirement for Council to maintain a D grade supply or better.</p> <p>There is the possibility that non serviced communities may demand water supplies or there may be a demand to extend some existing water supplies. Council will need to investigate the options for the most efficient and viable method of supply of water to these communities.</p> <p>Restrictions on water use have been necessary for consumers served by the Waihi and Waikino supplies during the summer when demand exceeds the raw water available. These restrictions will need to be considered again in the future, particularly if summer droughts become more frequent in the District.</p> <p>As with all legislation there is the possibility that the drinking water standards could change. If this was the case, Council would be required to make changes to its water supplies.</p>

Demand Management

For the Water activity there are a number of areas that could potentially affect the demand on the asset. These demands are predominantly assumption based and are reflected within this plan under the title of 'General Assumptions' (volume 1) and 'Financial Assumptions' (volume 2).

Population change is a demand driver. As the population is expected to rise, this will place additional demand on the water supply system. The demand, although apparent, is not expected to be extensive or unmanageable as a result of population growth or as a result of additional development.

Climate change could potentially place additional demand on the water supply activity. Drier periods and droughts create more demand for water while water and river levels are lower and therefore supply is decreased.

There are impacts on the water supply system, particularly on the Plains supply, caused by intensified farming practices, the amalgamation of farms and increases in the number of cows per hectare. These are key drivers in placing additional demands on the system.

The rural supplies on the Plains currently provide for the daily requirement of water to be delivered over any given 24 hour period. Many properties connected to this supply, have on site water storage for security of supply to ensure continual water availability to households and stock.

This storage policy has been agreed in the past with users of the Plains supply, but demand for a higher level of service may occur over the life of this Plan. Council will consider such requests by assessing the effects on the four well-beings balanced with cost.

Council's water supply capital works programme for 2009-19 is aimed at meeting

legislative requirements and standards for water quality; addressing security of supply issues and providing for capacity expansion.

Capital provision made for upgrades of the large water treatment works at Waihi, Paeroa, Kerepehi and Waitakaruru is to address water quality requirements as well as security of supply and capacity expansion issues. Capacity expansion of the Waihi plant will meet the demand currently being supplied from the smaller water take at Waikino. Paeroa plant will supply the present small takes at Mackaytown and Karangahake and possibly Kaimanawa. Kerepehi plant capacity has to be increased to meet the demand currently supplied from the Puriri take via Huirau Road.

Capital provision is also made for the significant upgrading and replacement programme for main water supply pipelines needed to connect the larger treatment plants with the areas presently served by the small water takes, as well as replacement of mains to meet serviceability and security of supply requirements.

Raw water storage development is provided for at Waitakaruru which is aimed at securing the raw water supply within the constraints of take limitations in consent conditions and weather and tide fluctuations. Provision has also been made to locate a new water source for this supply.

Treated water storage development is provided for at Kaimanawa, Kerepehi, Karangahake, Waikino and Waitakaruru to improve the security of supply of treated water by having cover against the risk of plant breakdown.

Network Services Group

Water Supply Services

Programmed actions for 2009-19

Please see page 41 for explanation of key water supply issues relating to new water quality standards, and their impact on Hauraki District.

Capital Works Schedule

Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Kaimanawa Upgrades				
Connect to Kerepehi / Paeroa Pipelines required to connect to the preferred supply.	-	-	-	1,065
Upgrade Kerepehi / Paeroa To contribute to either the Kerepehi or Paeroa upgrades. This will provide the additional 1megalitre per day (MLD) treatment capacity that will be required to supply the Kaimanawa scheme.	-	-	-	1,362
Treated water reservoir Construction of a 1500m ³ treated water reservoir for the Kaimanawa water supply to allow security of supply in the event of mains failures and other events.	-	-	-	454
Other	11	41	50	114
Karangahake/Mackaytown Upgrades				
Connection to Paeroa water supply Construction and connection of treated water reservoir to achieve compliance with both Drinking Water Standards, and likely resource consent conditions. This work may qualify for a Public Health subsidy; this possible funding source has not however been allowed for in the estimates due to the high level of competition which is expected for the limited funding available.	-	-	-	1,559
Other projects	12	10	88	222
Ohinemuri				
Decommissioning of dams	-	-	-	153
Renewal of mains	-	101	-	236
Waihi Road investigation Investigation and reconditioning of Waihi Road from the L & P Bottle to Reservoir Road.	36	36	-	-
Other projects	40	53	8	25
Paeroa Upgrades				
Paeroa water treatment plant upgrade Upgrade the Paeroa water treatment plant to meet drinking water standards, and supply sufficient water for Ohinemuri, Karangahake, and Mackaytown. This work may qualify for a Public Health subsidy; this has not however been allowed for in the budget due to the high level of competition which is expected for the limited funding available.	-	-	-	4,049
Renewal of mains	100	104	108	860
Other projects	92	73	37	310

Network Services Group

Water Supply Services

Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Plains Upgrades				
Mains renewals	334	347	360	2,879
Replacement of water meters	25	26	27	217
Waihou intake Upgrade the Waihou intake to supply 12MLD to the upgraded Kerepehi Treatment Plant.	319	-	-	-
Waitakaruru raw water storage Construction of the Waitakaruru raw water storage facilities required to meet resource consent requirements.	2,910	-	-	-
Investigation of deep groundwater resources Investigation of deep groundwater resources in the Waitakaruru hills.	150	-	-	-
Waitakaruru water storage reservoirs Construction of 6MLD of treated water storage reservoirs in the Waitakaruru area. These works are a carry over from the 2006-16 Hauraki Community Plan.	-	486	847	-
Bore replacement at chlorine shed, Waitakaruru Replacing a bore that failed.	150			
UV sterilisation Upgrade to provide UV sterilisation at the Waitakaruru water treatment plant.	600	-	-	-
Kerepehi water treatment plant upgrade 12MLD upgrade to the Kerepehi water treatment plant which provides the most cost effective solution in meeting the plains water supply needs, and upgrading to meet NZ Drinking Water Standards.	7,139	-	-	-
Kerepehi water storage 6MLD of treated water storage at Kerepehi. This has been carried forward (and adjusted for inflation) from the 2006-16 Hauraki Community Plan.	351	820	-	-
Standby pump for Waihou To provide a standby pump for the Waihou Treatment Plant due to the age of the current pump and the current limited capability of the back up pump, especially over peak summer demands.	130	-	-	-
Other projects	344	324	82	600
Waihi Upgrades				
Mains upgrades	100	104	108	866
Interim upgrade for disinfection compliance	198	-	-	-
Waihi water treatment upgrade Upgrade the Waihi water treatment plant to meet NZ Drinking Water Standards.	-	-	377	1,944
Alternative water source Commission an alternative source of water for the Waihi and Waikino water supplies. These works may both qualify for Public Health subsidy; this has not however been allowed for in the estimates due to the high level of competition which is expected for the limited funding available.	100	4,780	-	-
Other projects	157	101	32	220

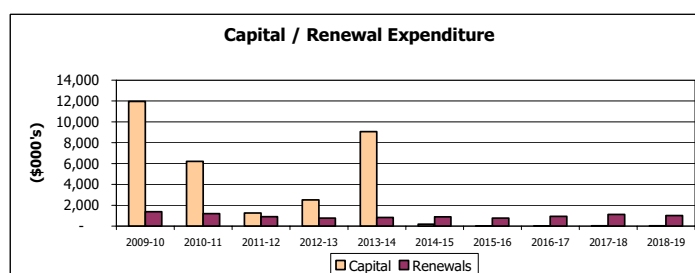
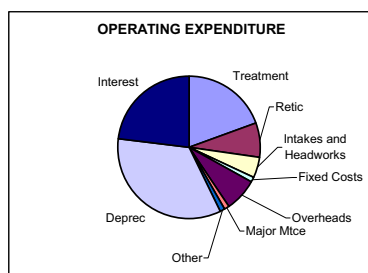
Network Services Group

Water Supply Services

Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Waikino Upgrades				
Connection of Waikino supply to Waihi Connection of the Waikino supply to Waihi, and allowance for a 500m ³ treated water reservoir at Waikino. These works are to achieve NZ Drinking Water Standards and comply with resource consents, along with ensuring the security of water supply in the event of a mains failure. These works may both qualify for Public Health subsidy; however this has not been allowed for in the estimates due to the high level of competition which is expected for the limited funding available.	-	-	-	998
Clean Dam/Decommission	-	-	-	76
Mains renewals	-	-	47	108
Other projects	41	8	2	7

What is the cost of operating the Water Supply activity?

	Forecast 2009-10 \$'000's	Forecast 2010-11 \$'000's	Forecast 2011-12 \$'000's	Forecast 2012-13 \$'000's	Forecast 2013-14 \$'000's	Forecast 2014-15 \$'000's	Forecast 2015-16 \$'000's	Forecast 2016-17 \$'000's	Forecast 2017-18 \$'000's	Forecast 2018-19 \$'000's
OPERATING EXPENDITURE										
Treatment	1,091	1,328	1,366	1,404	1,448	1,435	1,483	1,530	1,579	1,634
Reticulation	483	516	527	541	558	575	594	613	633	654
Intakes and Headworks	254	307	340	344	354	333	344	355	367	380
Fixed Costs	83	86	89	91	94	97	100	103	107	110
Overheads	496	502	525	523	529	558	554	571	601	602
Major Maintenance	28	53	102	73	130	58	56	79	76	146
Other	63	65	67	69	71	73	76	78	80	83
Depreciation	1,676	1,915	2,254	2,282	2,337	2,783	2,788	2,788	3,111	3,112
Interest	524	1,242	1,534	1,638	2,026	2,313	2,201	2,041	1,847	1,623
	4,698	6,014	6,804	6,965	7,547	8,225	8,196	8,158	8,401	8,344
LESS OPERATING REVENUE										
Water Meter Targeted Rate	4,678	5,191	5,714	6,324	6,849	7,377	7,907	8,432	8,956	9,481
OPERATING SURPLUS/(DEFICIT)	(20)	(823)	(1,090)	(641)	(698)	(848)	(289)	274	555	1,137
FUNDED BY										
Transfers to/(from) Water Reserve	(20)	(823)	(1,090)	(641)	(698)	(848)	(289)	274	555	1,137
	(20)	(823)	(1,090)	(641)	(698)	(848)	(289)	274	555	1,137
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	1,379	1,191	917	779	833	890	772	925	1,120	1,021
Level of Service Increases	4,252	1,443	1,256	2,512	7,705	180	29	29	31	32
Capacity Demand Increases	7,708	4,780	0	0	1,362	0	0	0	0	0
	13,339	7,414	2,173	3,291	9,900	1,070	801	954	1,151	1,053
Internal/External Loan Repayments	0	0	0	0	0	969	1802	2212	2619	3300
CAPITAL FUNDING REQUIRED	13,339	7,414	2,173	3,291	9,900	2,039	2,603	3,166	3,770	4,353
FUNDED BY										
Depreciation	1,676	1,915	2,254	2,282	2,337	2,783	2,788	2,788	3,111	3,112
Development Contributions	52	52	52	52	52	104	104	104	104	104
Internal/External Borrowing	11,631	6,270	957	1,598	8,209	-	-	-	-	-
Transfers from Water Reserve	(20)	(823)	(1,090)	(641)	(698)	(848)	(289)	274	555	1,137
	13,339	7,414	2,173	3,291	9,900	2,039	2,603	3,166	3,770	4,353



Wastewater Services

What is the Wastewater activity?

The Wastewater activity involves the collection, treatment and disposal of wastewater. Hauraki District Council provides and operates wastewater reticulation and treatment schemes for seven urban areas and ensures that sewage collection, treatment and disposal is undertaken in a manner that complies with Public Health Standards and specific Resource Consent conditions.

In addition to Council monitoring the ongoing sufficiency, effectiveness and efficiency of the public wastewater systems, Council's Regulatory Group maintains an overview of the sufficiency of the private collection and disposal systems, and takes appropriate steps when problems or potential problems are identified in the community.



Balancing of well-beings

The Sustainability Tuner

Score	Economic	Environmental	Social	Cultural
5				
4				
3				
2				
1				
0				
-1				
-2				
-3				
-4				
-5				

Please see page 88 for an explanation of how to use the sustainability tuner and appendix 8 which explains the criteria.

How does Council provide this activity?

The proper collection and disposal of wastewater is a necessary public health requirement. Council has seven treatment plants to which 5,044 properties are connected; and 43 pump stations operate to ensure wastewater is appropriately managed for the Hauraki District through its reticulation networks. The treatment plants are located at Kerepehi, Ngatea, Paeroa, Turua, Waihi, Waitakaruru and Whiritoa.

The balance of the Hauraki District population collects and disposes of its sewage by private means, usually septic tanks.

Management of the wastewater asset is through the Asset Management Plan, and an enforcement sense, is supported by Part 4 of the Hauraki Consolidated Bylaw, which regulates for the discharge of trade waste and

domestic wastewater into the sewerage systems operated by Council.

Legally, Council is required to act when potential health risks associated with wastewater collection and disposal (whether private or public) are identified; and is required to ensure that all inhabited buildings have safe and adequate wastewater collection and disposal. Council must also monitor the ongoing sufficiency, effectiveness and efficiency of the wastewater collection and disposal system, and maintain an overview of private collection and disposal systems. If issues arise, Council must take appropriate steps when problems or potential problems are identified, especially relating to community buildings.

Network Services Group

Wastewater Services

Walking the Talk

On Sustainability

Waihi Wastewater Treatment Plant

Waihi has one of the highest standards of wastewater treatment plants in New Zealand. The reason for this is that the treated water is discharged to land over a rock diffuser in the vicinity of the Ohinemuri River. The river travels through the District on a path which includes many areas of outstanding natural beauty. The cleaner we can get this treated water the better it is for the environment. The plant removes phosphorus, nitrogen and suspended solids to result in very low levels.

The water is so clean, that minimal further treatment would be needed for it to be drinkable. Although Council is not suggesting that it plans to take wastewater treatment this far, the sustainable principles shown by preserving the quality of the water in the river, will ensure that the Karangahake Gorge, fish and water within the river, and numerous plant life living either in or alongside the river will be protected for future generations, without adverse effects from water pollution.

By working hard to ensure that the treated water has the least destructive impact as possible on the environment, Council ensure that they can continue to have approved resource consent to use land discharge to dispose of treated effluent. Council works closely with the Waikato Regional Council to continuously meet and improve on treated wastewater standards and to adopt or develop new and improved methods of doing so.



Current Levels of Service and how Council will measure them

Current Levels of Service	Baseline 2007/08	Target 2009/10	Target 2010/11	Target 2011/12	2012-19
Wastewater services are affordable <u>Measure and method of measurement</u> Charges per average wastewater charges per household per annum, as measured through Council's financial system.	\$505	\$535	\$565	\$605	\$650
Sewage is managed without risk to public health <u>Measure and method of measurement</u> Frequency of sewage overflows affecting a single habitable dwelling in a year as measured by Council minutes.	3	<4	<3	<3	<2
A reliable wastewater service is provided <u>Measure and method of measurement</u> Number of service requests or complaints per year as measured by service request database.	New Measure	<114	<107	<101	<95
<u>Measure and method of measurement</u> Average response time to health and safety issues, as measured by the service request database.	8 hours	<8 hours	<8 hours	<7 hours	<6 hours
<u>Measure and method of measurement:</u> Satisfaction with the quality of wastewater supply, as measured by Council's triennial survey.	67%	-	>69%	-	2013 - >75% 2016 and 2019 Increasing

Contribution to Community Outcomes

- Management of our natural and physical environment in a sustainable manner.
- Long term planning ensures that our future infrastructure requirements meet the growth and development opportunities of our District.

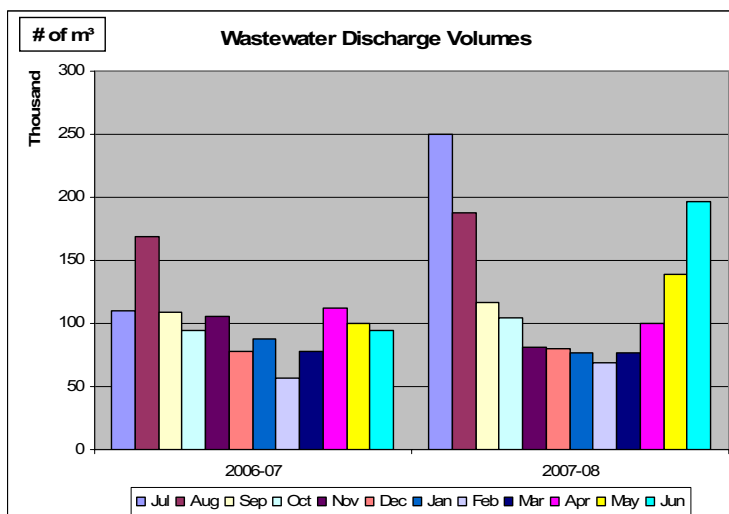
Possible impacts on Levels of Service

Level of Service	Possible impacts on Levels of Service
Wastewater services are affordable	A number of urban properties within the District still use septic tanks. It is planned to include as many of these properties as possible in future extensions to the urban reticulation. The investigation and installation programme currently targets Waihi East and Paeroa North-East areas.
Sewage is managed without risk to public health	A number of sewer overflows can occur in heavy rain events. None of these overflows are through habitable buildings, but the reasons for these overflows will continue to be investigated and remedied.
A reliable wastewater service is provided	<p>There is no current programme to provide non-reticulated communities with reticulated wastewater systems. Changing economic, environmental or health considerations could raise the need for a future programme.</p> <p>Paeroa, with the oldest network in the District, has a significant issue with old glazed earthenware pipelines. Flow monitoring and closed circuit television investigations are proposed, to guide a priority replacement programme for these pipes.</p> <p>The relatively new Waihi network (25 years old), has an issue of inflow and infiltration of stormwater into the system during significant rainfall events. This in turn causes sewage overflows into stormwater systems. Council will undertake flow monitoring and closed circuit television surveys to identify problem areas and prioritise remedial work.</p> <p>The next Assessment of Water and Sanitary Services review is expected to take place prior to the Hauraki Community Plan 2012-22. Depending on the outcome of this review there may be a need to consider the extent of some of the water and sanitary services that are currently provided for.</p>

Demand Management

Council has recently completed a major programme of consent renewals and upgrading of wastewater treatment plants at Paeroa, Waihi, Ngatea and Turua and installing a wastewater collection and treatment system at Waitakaruru. These upgrades ensure that Council's wastewater systems are able to cope with increased demands caused by even the most optimistic growth forecasts over the next 10 years. Due to the moderate increase in population forecasted for the planning term 2009/19, demand management is not a major issue for wastewater in the District.

Based on the Levels of Service review detailed in the Consultation and Decision-making section of this plan (see page 121) and the high level of community satisfaction, there are not expected to be significant demands from the community to change the wastewater asset during the life of this plan.



Network Services Group

Wastewater Services

As with all assets however, the effect of significant extreme weather may affect the wastewater activity with additional infiltration into the systems. This could be through one-off events or through an increase in frequency over the much longer term through the potential effects of climate change.

To show the average wastewater discharge volumes, the graph on the previous page highlights the discharge of wastewater for the 2006/07 and 2007/08 period.

Programmed actions for 2009 - 19

Capital Works Schedule – District-wide

\$11,434,000 of funding has been allocated for district-wide wastewater projects during the life of this plan. These activities are predominantly to take place at the end of the useful life of the particular part of the asset; however, this date cannot be identified with certainty at this stage. Council is working on a more robust way of more accurately identifying these dates of renewal for the future. These projects include:

- Replacement of pump station controllers
- Sewer main renewals
- Aerator and irrigation pump renewals
- Cabinet/ancillaries
- Telemetry
- Pond desludging

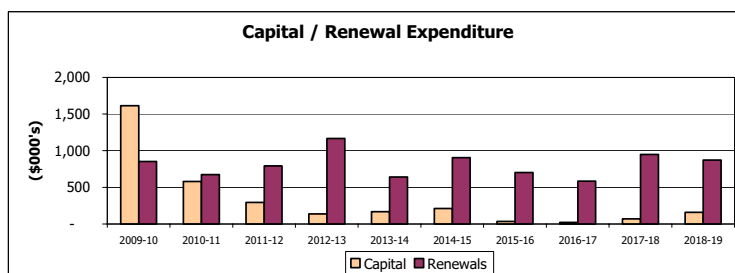
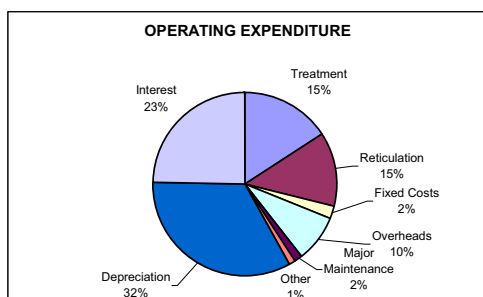
Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Total capital expenditure for Waste Water	2,466	1,253	1,089	6,626

Network Services Group

Wastewater Services

What is the cost of operating the Wastewater activity?

	Forecast 2009-10	Forecast 2010-11	Forecast 2011-12	Forecast 2012-13	Forecast 2013-14	Forecast 2014-15	Forecast 2015-16	Forecast 2016-17	Forecast 2017-18	Forecast 2018-19
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
OPERATING EXPENDITURE										
Treatment	548	567	584	601	620	640	661	681	705	727
Reticulation	458	470	489	499	513	527	547	563	578	597
Fixed Costs	70	73	75	77	80	82	85	87	90	93
Overheads	311	314	329	326	331	350	346	357	377	376
Major Maintenance	47	16	61	87	78	29	17	36	14	110
Other	41	42	44	45	46	48	49	51	52	54
Depreciation	1,091	1,123	1,254	1,261	1,264	1,390	1,395	1,396	1,558	1,560
Interest	892	998	1,047	1,090	1,107	1,096	1,057	974	873	764
	3,458	3,603	3,883	3,986	4,039	4,162	4,157	4,145	4,247	4,281
LESS OPERATING REVENUE										
Fees and Charges	2	2	2	2	2	2	2	2	2	2
Targeted Rates	2,818	3,013	3,267	3,527	3,791	4,116	4,450	4,791	5,140	5,498
	2,820	3,015	3,269	3,529	3,793	4,118	4,452	4,793	5,142	5,500
OPERATING SURPLUS/(DEFICIT)	(638)	(588)	(614)	(457)	(246)	(44)	295	648	895	1,219
FUNDED BY										
Transfers to/(from) Wastewater Reserve	(638)	(588)	(614)	(457)	(246)	(44)	295	648	895	1,219
	(638)	(588)	(614)	(457)	(246)	(44)	295	648	895	1,219
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	853	673	793	1,168	641	906	701	584	949	874
Level of Service Increases	1,176	580	296	139	167	212	36	22	68	159
Capacity Demand Increases	437	0	0	0	0	0	0	0	0	0
	2,466	1,253	1,089	1,307	808	1,118	737	606	1,017	1,033
Internal/External Loan Repayments	0	0	0	0	246	301	1026	1511	1509	1819
CAPITAL FUNDING REQUIRED	2,466	1,253	1,089	1,307	1,054	1,419	1,763	2,117	2,526	2,852
FUNDED BY										
Depreciation	1,091	1,123	1,254	1,261	1,264	1,390	1,395	1,396	1,558	1,560
Development Contributions	36	36	36	36	36	73	73	73	73	73
Internal/External Borrowing	1,977	682	413	467	-	-	-	-	-	-
Transfers from Wastewater Reserve	(638)	(588)	(614)	(457)	(246)	(44)	295	648	895	1,219
	2,466	1,253	1,089	1,307	1,054	1,419	1,763	2,117	2,526	2,852



Land Drainage Services

What is the Land Drainage activity?

The Land Drainage activity essentially helps preserve the use of land by managing water runoff in rural areas, by conveying it to water courses through drainage channels, culverts and pipes. By doing this the land is able to be farmed and inhabited without detrimentally affecting the ground water supplies.

Council provides drainage systems to: facilitate agriculture through soil moisture management, protect property, support farming and business activities in the rural areas, and to minimise adverse effects on the receiving environment.

Land drainage is a key activity of Council's operation as a considerable portion of the northern Hauraki Plains lies at or below the normal high tide level in the Firth of Thames. The remainder of the land on the Hauraki Plains is only slightly above this level, so protection against high tides and river floods is essential to the continuing occupation and use of the land for agricultural and horticultural operations. Effective land drainage is also essential to the continuing of this productive use.

The drainage and flood protection works and the Waikato Regional Council's river scheme stopbanks are provided as a matter of national importance. This is in order to protect the ability of the 45,000 hectares of prime and highly productive agricultural land to continue to contribute significantly to the national economy.

There are three land drainage districts within Hauraki District boundaries, being Western Plains, Eastern Plains and Paeroa Rural.

Balancing of well-beings

The Sustainability Tuner

Score	Economic	Environmental	Social	Cultural
5				
4				
3				
2				
1				
0				
-1				
-2				
-3				
-4				
-5				

Please see page 88 for an explanation of how to use the sustainability tuner and appendix 8 which explains the criteria.

Council currently owns and maintains:

- 668 km of drains
- 96 km of stopbanks
- 10 water control structures (e.g. manually operated sluice gates)
- 120 floodgates
- 5 pump stations
- Numerous access culverts and fences
- Three mobile flood pumps to deal with ponding created in emergency situations such as storm events.

How does Council provide this activity?

Development work on the drainage networks is essentially complete and Council's Land Drainage Asset Management Plan is focused towards ongoing maintenance and renewal of the existing asset.

Management of the Land Drainage asset is through the Asset Management Plan, and enforcement is supported by Part 7 of the Hauraki Consolidated Bylaw, which regulates for the control and protection of the land drainage works vested in, or under the management of Council.

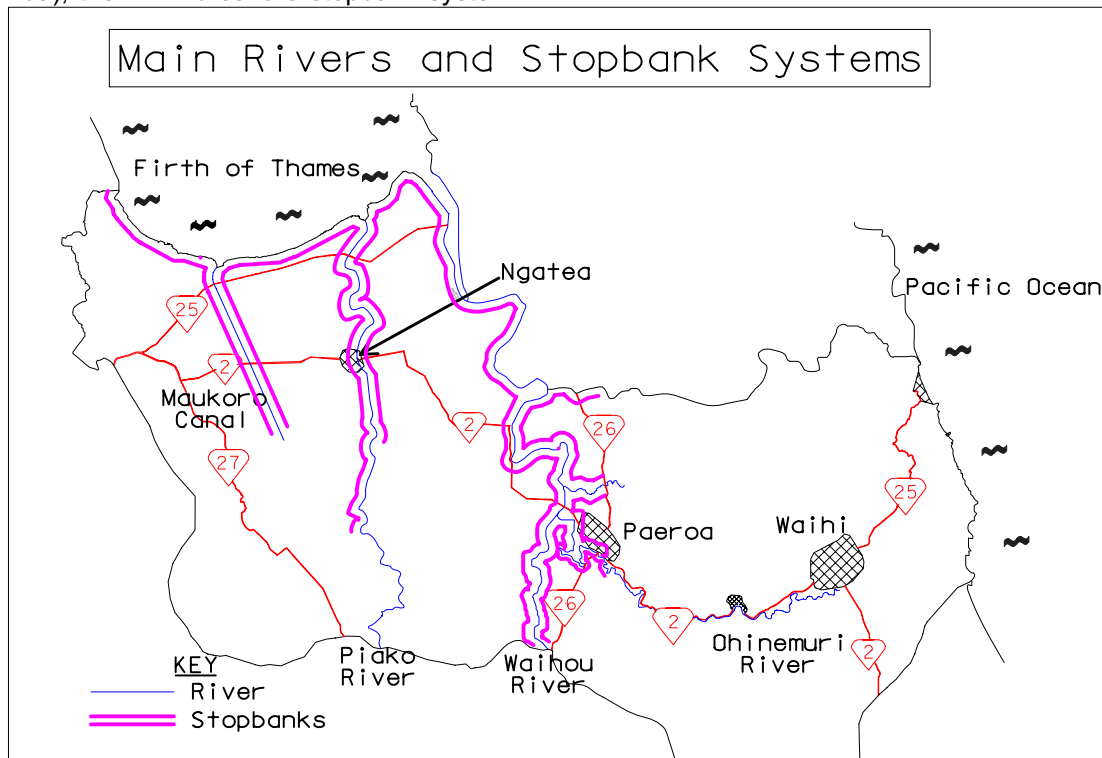
Council manages these drainage systems through the maintenance of drains, control structures, floodgates, flood pumps, culverts and stop-banks. Maintenance of the drains is a preventative mechanism used by Council to optimise performance of the drainage system. In turn Council is able to direct surface runoff to drainage outlets at an agreed level of service. Council maintains its drains by a combination of spraying and machine cleaning programmes, conducted by Council's Construction and Maintenance business unit.

In the northwest of the District (Waitakaruru to Miranda), the 7km foreshore stopbank system

with its associated pump station and flood gates, is the responsibility of the District Council. This system protects property from the adverse effects of tidal flooding and storm surge.

Each drainage district has its own advisory committee of members elected to represent ratepayers specifically on drainage matters in their area. The drainage advisory committees report directly to Council. The drainage committees establish levels of service with Council and the community and recommend the annual or ongoing works programme. Council then sets the rates to be collected on their behalf to fund these works.

Most of Council's drainage districts lie within the areas covered by the Piako River Scheme or the Waihou Valley Scheme operated by Environment Waikato (the Waikato Regional Council). The maintenance of these schemes; foreshore and river stopbanks and associated structures (such as the floodgates and pump stations) which provide the outlets for Council's drains, is also the responsibility of Environment Waikato.



Network Services Group

Land Drainage Services

Walking the *Talk*

On Sustainability

Land Drainage



The Piako River and the Waihou Valley Schemes operated by Environment Waikato are historic measures allowing the sustained and viable use of land for agriculture in the Hauraki Plains. In order to keep the use of this land viable, Council maintains a comprehensive network of land drains, stopbanks and floodgates along with pump stations which compliment the schemes.

By providing land drainage in the Hauraki Plains, Council is able to ensure that productive agricultural land is managed in a sustainable manner. This means that land which may be flooded from time to time due to storm events is drained in a timely manner in order to maintain viability. It also means that the ground water table is maintained to such

an extent that the peat lands do not shrink at uncontrolled rates.

Current Levels of Service and how Council will measure them

Current Levels of Service	Baseline 2007/08	Target 2009/10	Target 2010/11	Target 2011/12	2012-19
Quality drainage services provided to all customers <u>Measure and method of measurement</u> Percentage of customers satisfied with the drainage services as measured by the Triennial Survey	48%		>70%		>80%
Drainage emergencies are responded to <u>Measure and method of measurement</u> Percentage of emergencies and service requests responded to appropriately as measured by the service request database.	100%		>90%		>95%
Affordable drainage services are provided* <u>Measure and method of measurement</u> Average cost of providing drainage services per hectare as measured by Council's financial systems.	\$25.20	<\$22.30	<\$22.60	<\$22.80	<\$24.70
Reliable flood defence assets during abnormal flooding are provided <u>Measure and method of measurement</u> Percentage of drainage district flooded by a greater than design event (1 in 10 year event) as measured by investigation reports.	New Measure			<5%	
Contribution to Community Outcomes <ul style="list-style-type: none"> ▪ Maintaining and protecting vibrant rural communities. ▪ Management of our natural and physical environment in a sustainable manner. ▪ Long term planning ensures that our future infrastructure requirements meet the growth and development opportunities of our District. 					

***Note:** The reduction in drainage costs is due in part to the separation of stormwater from land drainage in rural towns.

Possible impacts on Levels of Service

Level of Service	Possible impacts on Levels of Service
Quality drainage services provided to all customers	<ul style="list-style-type: none"> ▪ Advancements in chemical sprays and biological methods to control weeds as and when they begin to adversely impact on the efficiency of drainage channels. ▪ Increased drainage pumping costs may be incurred in order to counteract the potential impact of climate change and rising sea level. ▪ Ground levels lowering on the peat soils of the Hauraki Plains may incur the need for additional pumping. ▪ Changes in land use, for example increased horticulture, could result in the need for increased drainage capacity. ▪ During the effective life of this plan, there may be a requirement for all the drainage authorities to work with Environment Waikato to develop a mechanism of consenting drain maintenance programmes. ▪ Increased environmental awareness surrounding the water quality discharged into the drainage system may lead to changes in the standards applied to drain management. Particular concerns that may require attention are: <ul style="list-style-type: none"> - The protection of water quality in drains/stream from contaminants that may be carried by urban stormwater (e.g. silt, hydrocarbons, untreated sewage, heavy metals) or stormwater runoff from roads. - The importance of riparian zones (stream banks) in the protection of the District's biodiversity and the need to integrate riparian zone management and improvement with agricultural practises.

Demand Management

Council's drainage systems are nearly fully developed and are currently on a programme of maintenance and renewal. Development of undeveloped land in the District for agricultural purposes has now been largely completed. Future demand caused by growth, on Council's system of canals, drains, stopbanks and flood control structures is expected to be very limited.

Increased drainage pumping capacity may be needed in time, to counteract the possible impact of climate change and rising sea level, in addition to that needed to counteract the lowering ground levels on the peat soils of the Hauraki Plains.

While there is unlikely to be any major drainage development in the foreseeable future, there will be small additions from time to time to the drainage network. The cost of these additions will be met by the beneficiaries of the additions. Provided a number of conditions are met, the completed drain addition will be added to the network.

Based on the levels of service review detailed in the Consultation and Decision-making section of this plan (see page 121) and the high level of community satisfaction there are not expected to be significant changes to the land drainage asset in the life of the plan as a result of community expectations increasing.

Other relevant issues

There has been considerable work undertaken at a national level on the possible effects of climate change and sea level rise. Council is aware that increases in average sea level, rainfall intensity and rainfall duration could have significant effects on the foreshore and lower river stopbank requirements

for the Region's river schemes. This may lead to the need for additional flood control measures and structures in the drainage districts. Given the relationship between the river schemes and the drainage districts, Council will work closely with Environment Waikato to develop appropriate responses over the life of this plan to mitigate the possible consequences of climate change and sea level rise. As well as addressing structural issues, funding issues will also need to be considered.

Programmed actions for 2009-19

Separation of urban stormwater networks

As originally signalled in the Hauraki Community Plan 2006-16, and subsequently raised in the draft Hauraki Community Plan 2009-19, Council proposed the full separation of the urban stormwater networks from the rural land drainage districts. No submissions to this proposal were received. Council approved this separation following the hearing of submissions to become effective from 1 July, 2009.

The identification and separation of the stormwater areas from the land drainage areas is seen to be a more logical, transparent, and equitable method of administering both the Stormwater and the Land Drainage activities. It was also seen to be a more appropriate method of allocating the operational costs associated with the higher standard of protection and amenity value that urban stormwater provides.

All Drainage Committee's confirmed their agreement to the drainage rate with a single flat rate levy, within each district, based on land value. The Western Plains Drainage District (WPDD) and the Eastern Plains Drainage District (EPDD) had confirmed their agreement to the separation of the stormwater operations in the urban areas from the rural land drainage operations.

Minor boundary changes will occur for part of the land drainage districts, e.g. the exclusion of some rolling land west of Mahuta Road in WPDD that does not receive a drainage benefit, and the inclusion of an area adjacent to Rotokohu Road in the Tirohia Rotokohu Drainage District (TRDD) that is not currently rated but which receives a drainage benefit.

Boundaries of the stormwater areas are to be generally land use catchment based, with a drainage service provided by connection to a stormwater or land drainage channel.

Network Services Group

Land Drainage Services

Capital Works schedule

There are currently no plans for future expansion to the Drainage network. However Council is currently in the process of maintaining the assets it has via the renewals listed below. There are potentially issues that could result in the development of strategies and infrastructure in the future.

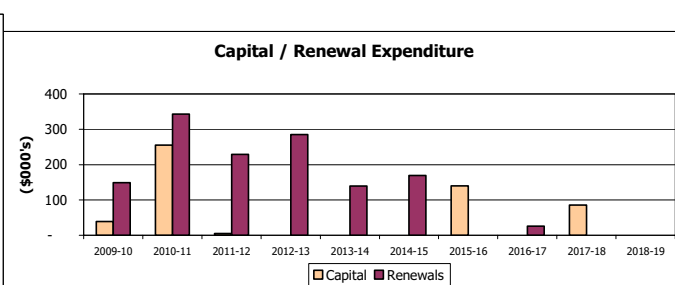
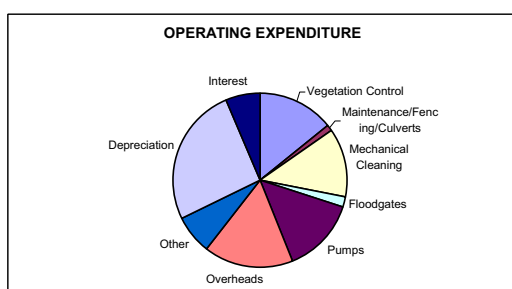
Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Eastern Plains				
Terrace stopbanks Staged reconstruction of Terrace stopbanks are programmed, as this is the expected time of renewal being required. The Terrace stopbanks are between Bush Road and the river, North of Ngatea.	-	21	-	72
Improvement plan items	39	5	6	-
Other projects	8	-	-	-
Western Plains				
Waitakaruru foreshore stopbank build up The renewal of the Waitakaruru foreshore stopbank.	-	-	-	145
Maukoro Canal left bank stopbank The renewal of the Maukoro Canal left bank stopbank.	-	125	-	-
Waitakaruru Stopbank (left and right bank) Reconstruction as currently below design specifications.	-	250	-	-
Van Eyk replacement The renewal of the Van Eyk floodgate due to the expected deterioration of condition rating by this date.	-	-	214	-
Smythes floodgate replacement The renewal of the Smythes floodgate, due to the expected deterioration of its condition rating by this date.	-	-	-	197
Improvement plan items	78	9	13	-
Indian floodgate to Waitakaruru stopbank renewal The renewal of the Waitakaruru Stream left stopbank between the Indian floodgate and the state highway bridge.	-	-	-	140
Pump screens Replacements of weed screen due to end of life.	-	-	-	66
North Miranda stopbank Construction of new stop bank to complete foreshore network link in order to complete the last link in the foreshore stopbank protection network.	50	-	-	-
Continuation of reconstruction programme of the Miranda-Waitakaruru foreshore stopbank systems Continuation of the programme of reconstruction of the Western Plains Drainage District Miranda-Waitakaruru foreshore stopbank systems.	-	-	-	139
Other projects	-	-	1	86
Komata North				
Miscellaneous	5	1	1	-
Opukeko				
Miscellaneous	3	-	-	-
Tirohia-Rotokohu				
Kauoiti stopbank reconstruction The reconstruction of the Kauoiti Stream stopbanks.	-	186	-	-
Other projects	5	1	1	-

Network Services Group

Land Drainage Services

What is the cost of operating the Land Drainage activity?

	Forecast 2009-10	Forecast 2010-11	Forecast 2011-12	Forecast 2012-13	Forecast 2013-14	Forecast 2014-15	Forecast 2015-16	Forecast 2016-17	Forecast 2017-18	Forecast 2018-19
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
OPERATING EXPENDITURE										
Vegetation Control	161	168	172	177	180	184	188	193	197	202
Maintenance/Fencing/Culverts	12	13	13	13	14	14	14	15	15	15
Mechanical Cleaning	149	151	155	159	166	166	170	174	182	182
Floodgates	20	21	21	22	22	23	23	24	24	25
Pumps	160	165	171	176	179	183	187	192	196	201
Overheads	198	198	206	205	208	218	218	224	235	236
Other	72	84	88	90	92	92	94	96	98	103
Depreciation	284	285	315	315	315	346	346	346	385	385
Interest	(17)	(22)	(24)	(38)	(55)	(77)	(100)	(130)	(163)	(199)
	1,039	1,063	1,117	1,119	1,121	1,149	1,140	1,134	1,169	1,150
LESS OPERATING REVENUE										
Targeted Rates	1,030	1,041	1,052	1,064	1,076	1,088	1,100	1,113	1,127	1,141
General Rates	182	184	186	188	190	192	194	196	199	201
	1,212	1,225	1,238	1,252	1,266	1,280	1,294	1,309	1,326	1,342
OPERATING SURPLUS/(DEFICIT)	173	162	121	133	145	131	154	175	157	192
FUNDED BY										
Transfers to/(from) Land Drainage Reserves	173	162	121	133	145	131	154	175	157	192
	173	162	121	133	145	131	154	175	157	192
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	149	343	229	285	139	169	0	26	0	0
Level of Service Increases	39	255	5	0	0	0	140	0	86	0
Capacity Demand Increases	0	0	0	0	0	0	0	0	0	0
	188	598	234	285	139	169	140	26	86	0
Internal/External Loan Repayments	269	0	202	163	321	308	360	495	456	577
CAPITAL FUNDING REQUIRED	457	598	436	448	460	477	500	521	542	577
FUNDED BY										
Depreciation	284	285	315	315	315	346	346	346	385	385
Internal/External Borrowing	-	151	-	-	-	-	-	-	-	-
Transfers from Land Drainage Reserves	173	162	121	133	145	131	154	175	157	192
	457	598	436	448	460	477	500	521	542	577



Stormwater Services

What is the Stormwater activity?

The Stormwater activity consists of the removal of rainwater runoff in urban areas, and through pipes, conveying it to water courses. Water runoff also contains material that needs to be managed appropriately including sediment, metals and other potentially polluting matter. Hauraki District Council maintains stormwater systems in the urban areas of Paeroa, Waihi, Ngatea, Turua, Kerepehi and Whiritoa, as the management of stormwater systems in these areas is essential for protection of the Hauraki District community and the environment.

Stormwater systems include natural watercourses, man-made drains, open channels, reticulated pipe networks and any other structures for accepting stormwater runoff. In Hauraki District, all stormwater systems, except Whiritoa, eventually discharge to either the Waihou or Piako Rivers via a tributary, or via a land drain. Waihi stormwater discharges by gravity flow, directly to the Ohinemuri River, and then to the Waihou River; and Paeroa and Ngatea stormwater discharges to Ohinemuri and Piako Rivers respectively, via outlets controlled by Environment Waikato floodgates and pump stations.

How does Council provide the Stormwater activity?

Council aims to ensure the efficient, safe and continuous removal of stormwater to minimise the effects of flooding to property and risks to human life. There is a community expectation that adequate stormwater protection will be provided. Council is seen to be the most appropriate agency to provide this service and it is consistent with the rural land drainage function. Council also has a statutory obligation to provide stormwater services in urban areas.

Council was granted comprehensive stormwater discharge consents by

Balancing of well-beings

The Sustainability Tuner

Score	Economic	Environmental	Social	Cultural
5				
4				
3				
2				
1				
0				
-1				
-2				
-3				
-4				
-5				

Please see page 88 for an explanation of how to use the sustainability tuner and appendix 8 which explains the criteria.

Environment Waikato for all urban areas in May 2003 for a term of 20 years, with five yearly review periods. These consents stipulate the monitoring requirements for the stormwater discharge and provide guidance on monitoring processes.

The stormwater activity is currently made up of a series of assets, including open drains (40.9km), reticulation (79.9km), manholes (840) and pump stations (2). Combined, these assets provide for the removal of water runoff that results from rainfall.

Network Services Group

Stormwater Services

Walking the *Talk*

On Sustainability

Stormwater detention pond - Whiritoa



In recent years sustainable techniques have been used to try and mitigate the possible increase in flooding caused by new developments and by extreme weather event run off. A stormwater detention pond has been built in Whiritoa which helps to reduce the impact of heavy rain by holding back the peak discharge so as to not overload the downstream reticulation.

By retaining this stormwater the pollutants (particularly sediments) are also filtered, leaving the remaining water, which discharges from a controlled outlet over the following days, cleaner than it would have been had it run off directly.

Current Levels of Service and how Council will measure them

Current Levels of Service	Baseline 2007/08	Target 2009/10	Target 2010/11	Target 2011/12	2012-19
Quality stormwater services provided to all customers <u>Measure and method of measurement</u> Percentage of customers satisfied with the stormwater services as measured by the triennial survey.	46%	>60%			>70%
Stormwater structure obstructions are minimal <u>Measure and method of measurement</u> Number of reported blockages in stormwater drains and structures as measured by the service request database.	24	<24	<22	<20	<15
Stormwater systems provide protection for residential buildings during 1 in 10 year storm events <u>Measure and method of measurement</u> Number of habitable residential buildings flooded in a less than 1 in 10 year event as measured by the service request database.	<5	<3			
Stormwater systems are affordable* <u>Measure and method of measurement</u> Average charge of providing stormwater services per rateable property, per annum as measured by Council's financial systems.	\$86	<\$117	<\$119	<\$127	<\$136
Stormwater systems provide efficient and reliable run off removal <u>Measure and method of measurement</u> Percentage of service requests regarding stormwater assets responded to within appropriate time, as measured by service request database.	96%	Maintain >90%			
Contribution to Community Outcomes <ul style="list-style-type: none"> Management of our natural and physical environment in a sustainable manner. Long term planning, ensures that our future infrastructure requirements meet the growth and development opportunities of our District. 					

***Note:** The reduction in stormwater costs is due in part to the separation of stormwater from land drainage in rural towns.

Possible impacts on Levels of Service

Level of Service	Possible impacts on Levels of Service
Quality stormwater services provided to all customers	<p>Council currently has a programme to pipe open urban stormwater drains. This programme will be reviewed through the life of this Plan. As Council's knowledge of the stormwater asset infrastructure and its condition improves through the Asset Management Plan process, modifications to the stormwater priorities may occur and would be signalled through the Annual Plan process or as an amendment to the Hauraki Community Plan.</p> <p>Council's District Plan identifies and protects floodways and ponding areas. During the Review of the District Plan these will need to be reassessed.</p> <p>It is expected that through the life of this Plan, additional sustainable engineering techniques will be identified and put into practice.</p> <p>Catchment Management Plans are in the process of being prepared. Depending on the outcome of these plans, there may be a need to reconsider the capital works and maintenance programmes for the stormwater systems. Any relevant amendments will be consulted on through an Amendment to the Hauraki Community Plan 2009-19.</p>
Stormwater systems provide protection for residential buildings during 1 in 10 year storm events	<p>Environment Waikato may consider a minor improvement to the Paeroa Main Drain (Hape Stream) pumps to increase capacity. The pumps have been converted to diesel generation to improve reliability.</p> <p>During the life of this Plan, an Event Management and Flood Control procedure will be developed. Depending on the outcome of this process there may need to be some changes to the way major weather events are managed.</p>

Demand Management

Based on the levels of service review undertaken and the community level of satisfaction of 98% there are not expected to be any significant changes to the stormwater asset during the life of this Plan as a result of community expectations increasing.

The supporting assumptions of this Plan indicate that population growth, and the growth of rating units are not expected to increase significantly; therefore the demand from the number of people in the urban areas, should not increase to where the level of service changes affect the ratepayer.

It is highly likely that the effects of climate change may impact on the stormwater asset.

Council is currently developing a policy stance on this, and more information can be found in the 'Key Community Issues' section of this Plan. The assumption is that rainfall is likely to decrease as an annual average over the next 100 years; however major rainfall events are predicted to intensify by 20%. For both these expected demands on the stormwater asset, change is expected to be gradual and they are not expected to have a significant effect during the life of this Plan.

The modelling of the stormwater network over time may indicate demand or demand management issues.

Network Services Group

Stormwater Services

Programmed actions for 2009-19

Separation of urban stormwater networks

As originally signalled in the Hauraki Community Plan 2006-16, and subsequently raised in the draft Hauraki Community Plan 2009-19, Council proposed the full separation of the urban stormwater networks from the rural land drainage districts. No submissions to this proposal were received. Council approved this separation following the hearing of submissions. The proposal was adopted by Council to be effective from 1 July, 2009.

Further detail on this change is available in the Land Drainage activity on page 195.

Capital Works schedule

Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Paeroa Urban Stormwater				
Paeroa Racecourse detention Racecourse detention/diversion to prevent potential flooding of properties on Thames Road.	40	-	-	-
Railway reserve, Paeroa Railway reserve stormwater extension – continuation of the northern CBD improvements.	160	-	-	-
Arney Street, Paeroa Arney Street – continuation of the CBD improvements.	-	83	-	-
Normanby Road, Paeroa Normanby Road – to address ponding problems that have become evident in heavy rainfall.	-	104	-	-
Criterion pump upgrade, Paeroa Criterion pump upgrade – improvements to operational reliability.	10	-	108	-
Improvement plan items	54	24	9	-
Miscellaneous renewals	-	-	-	1,410
Other projects	10	-	-	-
Waihi Urban Stormwater				
Morgan Park stormwater line renewal, Waihi Improvements to stormwater line in Morgan Park. This line renewal has been rescheduled to 2010-11.	-	52	-	-
Miscellaneous upgrades	34	35	37	293
Miscellaneous renewals	27	28	29	234
Improvement Plan Items	54	24	9	6
Other projects	-	-	-	1

Network Services Group

Stormwater Services

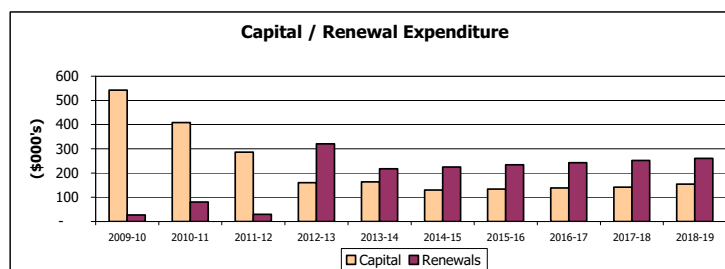
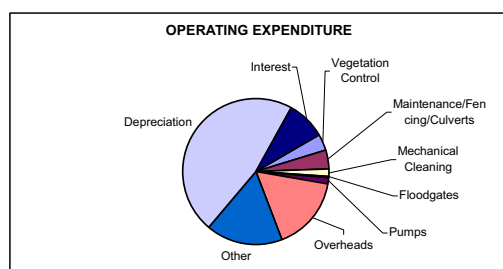
Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Ngatea Urban Stormwater				
Continuation of piping of drains programme in Ngatea Township Continuation of programme of stormwater improvements in Ngatea through the piping of open drains.	55	57	58	301
Ngatea urban pump upgrades Contribution to a Regional Council upgrade for the Ngatea urban pump stations, if it is found necessary that the upgrade is to go ahead.	-	-	-	109
Improvement plan items	27	12	4	-
Turua Urban Stormwater				
Continuation of Turua stormwater improvement programme Continuation of programme of stormwater improvements in Turua through the piping of open drains.	33	34	35	268
Improvement plan items	14	6	2	15
Kerepehi Urban Stormwater				
Continuation of Kerepehi stormwater improvement programme Continuation of programme of stormwater improvements in Kerepehi through the piping of open drains.	22	23	23	137
Improvement plan items	14	6	2	-
Whiritoa Beach outfalls	15	-	-	-

Network Services Group

Stormwater Services

What is the cost of operating the Stormwater activity?

	Forecast 2009-10 \$000's	Forecast 2010-11 \$000's	Forecast 2011-12 \$000's	Forecast 2012-13 \$000's	Forecast 2013-14 \$000's	Forecast 2014-15 \$000's	Forecast 2015-16 \$000's	Forecast 2016-17 \$000's	Forecast 2017-18 \$000's	Forecast 2018-19 \$000's
OPERATING EXPENDITURE										
Vegetation Control	27	28	31	32	33	34	35	35	36	37
Maintenance/Fencing/Culverts	34	36	37	38	39	40	41	42	43	44
Mechanical Cleaning	14	15	15	16	16	16	17	17	18	18
Floodgates	-	1	1	1	1	1	1	1	1	1
Pumps	12	13	13	13	14	14	14	15	15	16
Overheads	139	139	144	144	146	153	153	157	165	165
Other	143	148	144	148	152	155	160	164	168	173
Depreciation	363	365	407	407	411	451	455	455	513	513
Interest	79	91	92	91	92	87	79	72	64	56
	811	836	884	890	904	951	955	958	1,023	1,023
LESS OPERATING REVENUE										
Targeted Rates	696	712	749	761	774	808	812	820	860	865
General Rates	123	126	132	134	137	143	143	145	152	153
	819	838	881	895	911	951	955	965	1,012	1,018
OPERATING SURPLUS/(DEFICIT)	8	2	(3)	5	7	-	-	7	(11)	(5)
FUNDED BY										
Transfers to/(from) Stormwater Reserves	8	2	(3)	5	7	-	-	7	(11)	(5)
	8	2	(3)	5	7	-	-	7	(11)	(5)
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	27	80	29	321	218	225	234	243	252	260
Level of Service Increases	532	408	178	160	163	130	134	138	142	154
Capacity Demand Increases	10	0	108	0	0	0	0	0	0	0
	569	488	315	481	381	355	368	381	394	414
Internal/External Loan Repayments	0	0	99	0	47	116	107	101	128	114
CAPITAL FUNDING REQUIRED	569	488	414	481	428	471	475	482	522	528
FUNDED BY										
Depreciation	363	365	407	407	411	451	455	455	513	513
Development Contributions	10	10	10	10	10	20	20	20	20	20
Internal/External Borrowing	188	111	-	59	-	-	-	-	-	-
Transfers from/(to) Stormwater Reserves	8	2	(3)	5	7	-	-	7	(11)	(5)
	569	488	414	481	428	471	475	482	522	528



Solid Waste Services

What is the Solid Waste Activity?

The Solid Waste activity consists of three parts; solid waste collection, solid waste minimisation and landfill aftercare.

- Solid waste collection is the District-wide collection of refuse and recycling, and the management of the District's two transfer stations, located in Paeroa and Waihi.
- Solid waste minimisation is the effort made to reduce the District-wide waste stream to enhance environmental and economic benefits and comply with legislative requirements.
- Landfill aftercare is the post closure care of landfills, normally through site monitoring and carrying out of the post closure requirements of the relevant resource consents.



Balancing of well-beings

The Sustainability Tuner

Score	Economic	Environmental	Social	Cultural
5				
4				
3				
2				
1				
0				
-1				
-2				
-3				
-4				
-5				

Please see page 88 for an explanation of how to use the sustainability tuner and appendix 8 which explains the criteria.

How does Council provide the Solid Waste Activity?

Council provides the services through a number of avenues. Firstly, through carrying out refuse collections in the urban communities of Ngatea, Paeroa, Karangahake, Waikino, Waihi and Whiritoa on a weekly basis by contract. Secondly, this refuse collection is supported by the weekly kerbside recycling collection service, for the majority of urban communities in the district. At present rural areas are not serviced by the refuse and kerbside recycling scheme, as local providers operate similar schemes. Thirdly, Refuse Transfer Stations are situated at Grey Street, Paeroa and Dean Crescent, Waihi. Refuse that is not able to be recycled is transferred to the privately owned and operated landfill at Tirohia.

Waste reduction and recycling is encouraged, with collection points for recyclable waste provided at each transfer station. Litter bins are provided on streets and roads where required.

Aftercare for landfills is carried out through managing and monitoring of the closed landfill sites to the appropriate legislative standard. Council currently has three landfills being managed through the resource consent process for closure.

Network Services Group

Solid Waste Services

Walking the Talk

On Sustainability

Kerbside Recycling



In 2008 Council introduced a recycling scheme due to public demand, and the increased need to act in an environmentally sustainable manner.

When the materials that you recycle go into new products, they don't go into landfills or incinerators, so landfill space is conserved. For example in the first month of operation of the recycling scheme the volume of kerbside collected refuse disposed to landfill reduced by approximately 10 tonnes per weekly collection, a total of approximately 40 tonnes for the month.

The kerbside recyclable collection averaged 7 tonnes per weekly collection. The kerbside collected paper, metal cans and plastic recyclables are currently exported to China for remanufacture. Glass is crushed and remanufactured or otherwise utilised in New Zealand.

Current Levels of Service and how Council will measure them

Current Levels of Service	Baseline 2007/08	Target 2009/10	Target 2010/11	Target 2011/12	2012-19
Convenient and accessible waste management services are provided to the community <u>Measure and method of measurement</u> Number of properties within the targeted rating areas who have access to kerbside recycling and refuse bag collection service, as measured by G.I.S. database.	New Measure		>5300		>5500
<u>Measure and method of measurement</u> Percentage of customers satisfied with the refuse collection service, as measured by the triennial survey.	52%		55%		60%
Refuse is regularly collected <u>Measure and method of measurement</u> Number of complaints of missed weekly collections per annum, as measured by service request database.	58 Collection only		Maintain <80 Collection and recycling		
<u>Measure and method of measurement</u> Volume of refuse transferred to landfill from transfer station, as measured by reports from contractor.	5891 tonnes		Decreasing		
Contribution to Community Outcomes <ul style="list-style-type: none"> Management of our natural and physical environment in a sustainable manner. Long term planning, ensures that our future infrastructure requirements meet the growth and development opportunities of our District. 					

Possible impacts on Levels of Service

Level of Service	Possible impacts on Levels of Service
Convenient and accessible waste management services are provided to the community	<p>Council is in the process of refining landfill closure requirements with Environment Waikato. The landfills at Kerepehi, Waihi and Paeroa have been out of use for several years and resource consents are required for their closure, on-going monitoring and post closure care. Provision is made in the ten year plan for these requirements.</p> <p>Council will continue to encourage waste minimisation in a supportive role and continue with its existing charging incentives.</p> <p>Council will endeavour to actively divert as much of the waste streams to recycling initiatives as possible, having regard to prevailing market conditions and forces.</p> <p>Council has an adopted Waste Management Plan that is required to be updated on a regular basis where changes in levels of service will be identified. The next scheduled review is programmed to occur during the 2009/10 and 2010/11 period.</p>
Refuse is regularly collected	<p>Rural refuse collections are being offered by private operators. There is no indication that Council should become involved in this service, therefore there are no plans for Council to undertake a rural refuse collection service in the future.</p>

Demand Management

It is expected that the demand management objective for the Solid Waste activity is to reduce the volume of residual waste that has to be disposed of at the landfill.

Based on the levels of service review undertaken and the recent high level of community satisfaction, there is not expected to be significant community pressure to do anything other than continue to reduce the volume of waste to the landfill.

However, taking into consideration the assumptions underlying the Hauraki Community Plan 2009-19, population growth is expected to increase slightly (by an estimated 4%). Although this is not a significant factor for some major infrastructural assets, an increase in population by over 600 people (estimated)

means that the assumption could be made that this will make it difficult to reduce the volume of waste to the landfill with an extra 4% of residents.

Council expects to counteract this projected population increase by promoting the reduction of the volume of waste to the landfill through the consideration of:

- Further education campaigns
- Waste minimisation policies
- Waste separation policies
- Greater user pays schemes

Programmed actions for Solid Waste services for 2009-19

Paper for trees

Council is currently looking into an initiative with a waste minimisation education consultant, that if successful, will see schools being encouraged to recycle paper and being rewarded with a tree for planting once they reach a certain amount of recycled paper. This initiative will be investigated further and be considered by both schools and Council in the coming year.

Ngatea Green Waste Transfer Station

In response to demand from the community Council will be investigating the feasibility of a green waste transfer station in Ngatea. This feasibility study is likely to occur within the next three years.

Paeroa Refuse Transfer Station operating hours

From 6 July 2009, there will be a change in the operating hours of the Paeroa refuse transfer station. The new hours are 12:30pm to 5:30pm each day, except Wednesdays when it will be closed. It will also be closed on public holidays.

The Waihi refuse transfer station opening hours will remain the same. These hours are 10:00am to 4:00pm each day except Tuesdays and Thursdays, when it will be closed. It will also be closed on public holidays.

Capital Works schedule

Project	2009/10 (\$'000)	2010/11 (\$'000)	2011/12 (\$'000)	2012-19 (\$'000)
Paeroa refuse transfer station Paeroa refuse transfer station slab and roading replacement/rehabilitation.	-	-	-	48

Network Services Group

Solid Waste Services

What is the cost of operating the Solid Waste activity?

	Forecast 2009-10 \$000's	Forecast 2010-11 \$000's	Forecast 2011-12 \$000's	Forecast 2012-13 \$000's	Forecast 2013-14 \$000's	Forecast 2014-15 \$000's	Forecast 2015-16 \$000's	Forecast 2016-17 \$000's	Forecast 2017-18 \$000's	Forecast 2018-19 \$000's
OPERATING EXPENDITURE										
Refuse Collection	210	220	220	231	213	223	220	234	235	246
Closed Tip Sites	80	88	85	86	88	91	98	94	98	99
Transfer Stations	777	804	838	772	786	808	823	842	868	861
Other	83	82	98	97	87	90	91	94	97	99
	1,150	1,194	1,241	1,186	1,174	1,212	1,232	1,264	1,298	1,305
LESS OPERATING REVENUE										
Fees and Charges	657	683	702	719	734	750	767	785	804	824
Subsidies	52	54	55	56	58	59	60	62	63	65
Targeted Rates	213	217	223	228	216	220	224	230	239	242
General Rates	231	237	264	179	170	180	185	183	194	170
	1,153	1,191	1,244	1,182	1,178	1,209	1,236	1,260	1,300	1,301
OPERATING SURPLUS/(DEFICIT)	3	(3)	3	(4)	4	(3)	4	(4)	2	(4)
FUNDED BY										
Transfers to/(from) General Reserve	3	(3)	3	(4)	4	(3)	4	(4)	2	(4)
	3	(3)	3	(4)	4	(3)	4	(4)	2	(4)
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	-	-	-	48	-	-	-	-	-	-
Level of Service Increases	-	-	-	-	-	-	-	-	-	-
Capacity Demand Increases	-	-	-	-	-	-	-	-	-	-
	-	-	-	48	-	-	-	-	-	-
Landfill Liability	-	279	80	137	85	87	-	-	-	-
CAPITAL FUNDING REQUIRED	-	279	80	185	85	87	-	-	-	-
FUNDED BY										
Depreciation	83	82	98	97	87	90	91	94	97	99
Transfers from/(to) General Reserve	(83)	197	(18)	88	(2)	(3)	(91)	(94)	(97)	(99)
	-	279	80	185	85	87	-	-	-	-

