

Land Drainage Services



Tirohia Canal, Mill Road Pump Station and Floodgate

A considerable portion of the northern Hauraki Plains lies at or below normal high tide level in the Firth of Thames. The balance is only slightly above this level, so protection against high tides and river floods is essential to continuing occupation and use of land for agricultural operations on the plains. Effective land drainage is also essential to continue this productive use.

Hauraki District Council has defined land drainage areas which manage water run-off to achieve an agreed level of protection for the community and the environment. Hauraki District Council is responsible for the operation of these land drainage systems.

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

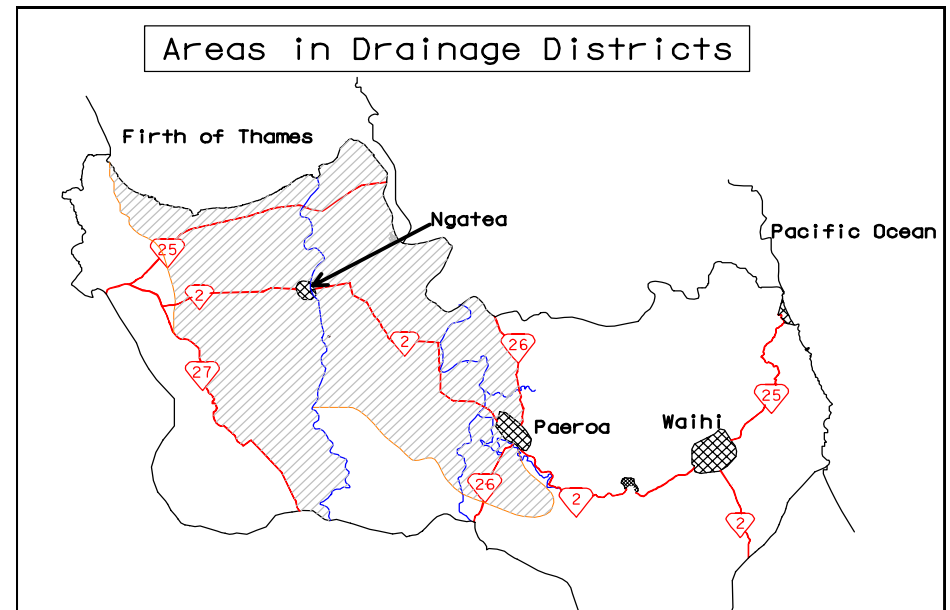
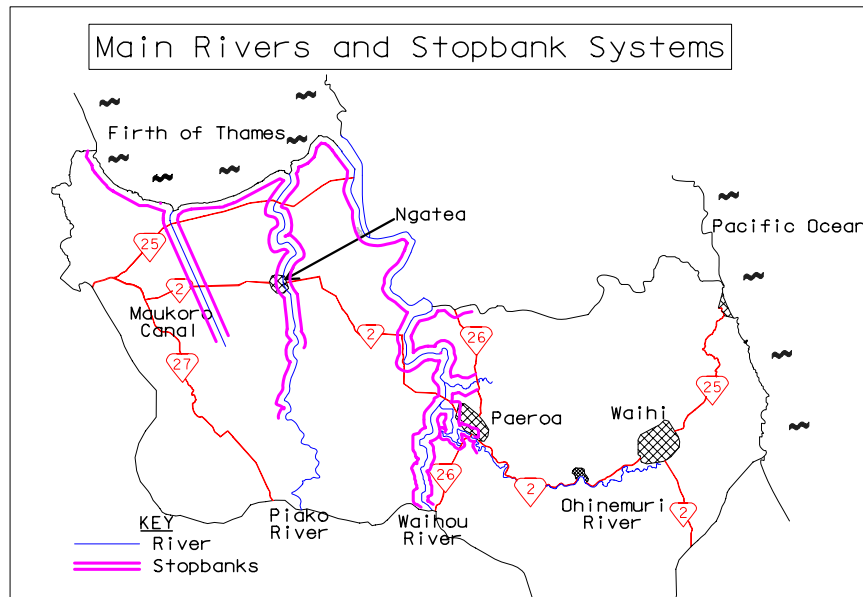
Most of Council's drainage districts lie within the areas covered by the Piako River or the Waihou Valley Schemes operated by the Waikato Regional Council, Environment Waikato. The maintenance of these schemes' foreshore and river stopbanks and associated structures (such as the floodgates and pump stations),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

Hauraki District has 463 dairy farms of which as at 30 June 2005 held 112,391 cows on 40,175 hectares and produced 33,940,677 kilograms of milk solids. At a \$4.00/kg payout this equates total gross revenue for these farms of \$135,762,708.

The drainage and flood protection works and river scheme stopbanks are provided as a matter of national importance to protect the ability of this prime agricultural land to continue to contribute significantly to the national economy.

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There are three land drainage districts being Western Plains, Eastern Plains and Paeroa Rural. Council manages these drainage systems through the maintenance of drains, control structures, floodgates, flood pumps, culverts and stop-banks. In the northwest of the District (Waitakaruru to Miranda), the 7km foreshore stopbank system with its associated pump and flood stations, 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 sub-committee of members elected to represent ratepayers specifically on drainage matters in their area.

CURRENT LEVELS OF SERVICE

The drainage committees report directly to Council. The drainage committees establish levels of service with Council and the community and recommend the works programmes for each year. Council then sets the rates to be collected on their behalf to fund these works.

Council has 681 km of drains, 86 km of stopbanks, 10 water control structures, 131 floodgates, five pump stations, and numerous access culverts and fences. Council also has mobile flood pumps to dispose of ponding resulting from emergency situations such as storm events.

Maintenance of the drains is a preventative mechanism used by Council to optimise performance of the drainage system to deliver water to the outlets at an agreed level of service. Council maintains its drains by a combination of spraying and machine cleaning programmes.

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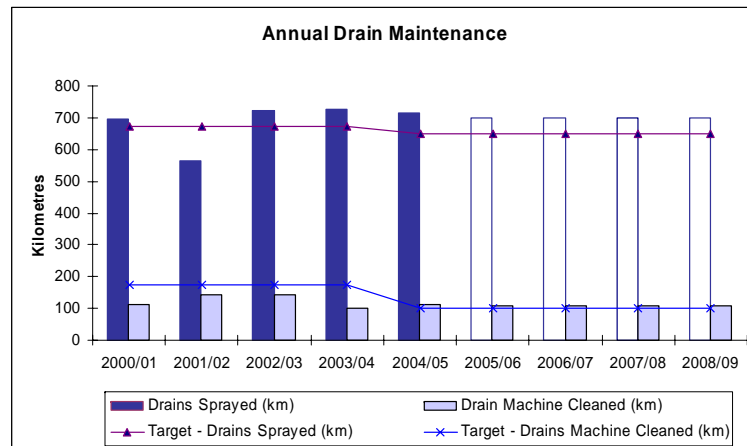
ENVIRONMENT WAIKATO

Given that most of the drainage and surface flooding is disposed of through Environment Waikato floodgates, drains and pump stations to the main river channels of the Piako and Waihou Rivers, it is important that a close working relationship is maintained with Environment Waikato. Council does this by appointing representatives of the Council and Drainage Districts to the Environment Waikato Waihou Valley Scheme-Piako River Scheme Liaison sub-committee

There is also a close and co-operative relationship between the staff of both councils for the inspection and operation of floodgates and pump stations, particularly in emergency situations.

SIGNALLING POSSIBLE CHANGE IN LEVELS OF SERVICE

- Improvements to chemical sprays, biological control of weeds and improved water quality due to changing farm effluent technologies are predicted to have a positive effect on the land drainage system.
- 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.
- Changes in land use, for example increased horticulture, could result in the need for increased drainage capacity.



WHAT WILL SUCCESS LOOK LIKE?

Current Levels of Service	Measure	Method of Measuring Target	Baseline	2006-09 Target	2009-16 Target	Contribution to Community Outcomes
Provide efficient reliable land drainage systems.	Systems are able to drain 38mm of runoff in 24 hrs.	System design and rainfall records.	100%	100%	100%	We value the provision of well-managed infrastructural services in our District; Our communities support the viability of maintaining our rural lifestyles and values; Protecting the viability of our land for primary production.
Quality customer communication, consultation and service provided.	Emergencies responded to within 3 hrs. Faults responded to within 48 hours.	Service request database.	New measure	>90% > 90%	Increasing	

COUNCIL'S PROPOSED STRATEGIES

While there are no current plans for future expansion to the Drainage Districts other than the Pouarua-Maukoro works signalled in this plan and Council is in the business of maintaining the assets, there are issues that could result in the development of future strategies and infrastructure.

During the effective life of this plan, there may be a requirement on all the drainage authorities to work with Environment Waikato to develop a mechanism of consenting drain maintenance programmes.

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. Besides addressing structural issues, funding issues will also need to be considered.

During the current Review of the District Plan, Council will have to give consideration to the setting of appropriate floor levels for habitable buildings, and/or the establishment of other land drainage infrastructure, to ensure that these buildings comply with the 50 year return period flood levels (2% Annual Exceedance Probability) established by the Building Act 2004.

The rural town's stormwater systems may become a ward or district function rather than the responsibility of the land drainage committees. An urban stormwater rate would be a probable consequence of the separation of the stormwater from the land drainage function.

DEMAND MANAGEMENT

Council's drainage systems are nearly fully developed and are currently on a programme of maintenance and renewal.

Additional capacity is planned for Pouarua-Maukoro as detailed above, as is the programmed completion of foreshore stopbank works.

Development of undeveloped land for agricultural purposes has now been largely completed and future demand caused by growth on Council's system of canals, drains, stopbanks and flood control structures is now very limited.

As detailed some works may be needed as a result of climate change and sea level rise but planning is now underway for this possibility.

HAZARD ASSESSMENT

Council and Environment Waikato have embarked upon a joint hazard assessment project covering the Hauraki Plains. The goal of this assessment is to ensure the identification and risk analysis of hazards, refer to Policy Development activity on page 93 and to identify any appropriate mitigation and protection measures.

PLANNED CAPITAL WORK

- Floodgates will be replaced when their condition rating drops to poor.
- Pouarua-Maukoro southern stage capital works include provision of new pumps and drainage reorientation. This work will be undertaken in conjunction with Environment Waikato, and will be progressive as ground levels lower.
- Provision is made for the replacement of three of the four control structures in the Eastern Plains Drainage District. A review of the functioning of the drainage system in the vicinity of these structures will be undertaken to ascertain the need and priority for the actual replacement.

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- Improvements and renewals of stormwater systems in rural settlements have been programmed in the drainage district capital works.
- Stop-bank construction and reconstruction programme will extend a further 3-4 years.
- Three of Council's five rural pump stations were built in 2001. The other two had major overhauls in 2000 and 2003. No further major renewals are expected in the next 20 years.
- A number of issues associated with land drainage will need to be addressed in Council's Review of its Operative District Plan. These include the methods for ensuring access to drains for maintenance purposes is appropriate and possible developer contributions towards Drainage District requirements.

LAND DRAINAGE	2006/07 (\$'000)	2007/08 (\$'000)	2008/09 (\$'000)	2009/16 (\$'000)
Smythes floodgate replace	80			
Waitakaruru stopbank - right bank	60			
Foreshore stopbank Indian floodgate to Waitakaruru	60			
Waitakaruru upstream to State Highway	20			
Eastern Plains Drainage District				
Turua stormwater improvements	30	31	33	
Kerepehi stormwater improvements	20	21	22	23
Kauoititi stopbank reconstruction				179

MAJOR CAPITAL EXPENDITURE

LAND DRAINAGE	2006/07 (\$'000)	2007/08 (\$'000)	2008/09 (\$'000)	2009/16 (\$'000)
Western Plains Drainage District				
Piping Ngatea Township	50	52	55	263
Maukoro stopbank		103		
Van Eyk replacement			106	
Waitakaruru floodgate upgrade			101	
Pouarua/Maukoro final design documentation	100	103		
Pouarua/Maukoro southern area works		1,160	159	865
Ngatea urban pumps		103		

WHAT ARE THE SIGNIFICANT NEGATIVE EFFECTS OF LAND DRAINAGE?

The negative effects relating the Land Drainage activity include:

- Land drainage of peat lands to allow productive farming lowers the underground water level and encourages the vertical shrinkage of peat which results in the lowering of ground levels. This increases the need for pump stations and can lead to depletion of natural wetlands and biodiversity;

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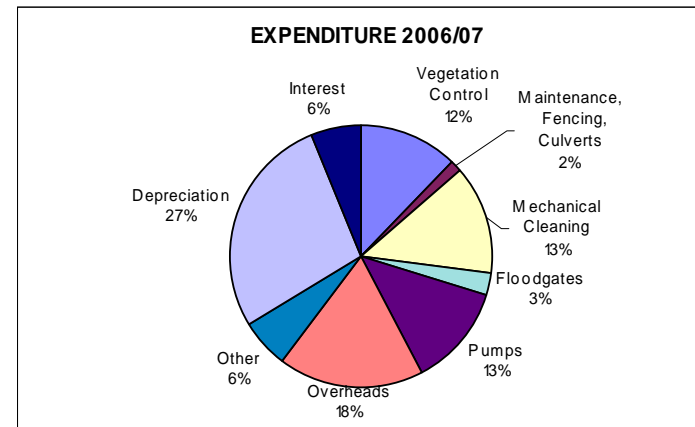
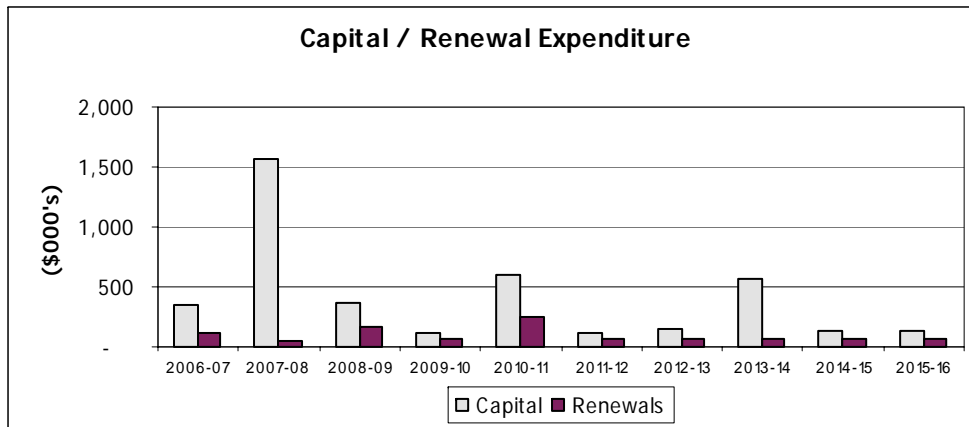
WHAT IS THE COST OF OPERATING THE LAND DRAINAGE ACTIVITY?

	Budget 2006-07 \$000's	Budget 2007-08 \$000's	Budget 2008-09 \$000's	Budget 2009-10 \$000's	Budget 2010-11 \$000's	Budget 2011-12 \$000's	Budget 2012-13 \$000's	Budget 2013-14 \$000's	Budget 2014-15 \$000's	Budget 2015-16 \$000's
OPERATING EXPENDITURE										
Vegetation Control	144	147	152	156	160	163	167	170	173	175
Maintenance/Fencing/Culverts	19	19	20	21	21	22	22	22	23	23
Mechanical Cleaning	156	165	166	170	175	179	183	186	189	192
Floodgates	35	34	35	35	36	37	38	39	39	40
Pumps	149	153	158	162	166	170	173	176	179	182
Overheads	213	196	206	192	195	202	203	205	212	211
Other	74	77	82	85	86	86	88	90	91	95
Depreciation	326	329	335	337	339	341	343	345	347	349
Interest	73	76	169	181	163	195	175	152	161	132
	1,189	1,196	1,323	1,339	1,341	1,395	1,392	1,385	1,414	1,399
LESS OPERATING REVENUE										
Targeted Rates	1,104	1,135	1,166	1,199	1,232	1,273	1,309	1,346	1,383	1,422
General Rates	195	200	206	212	217	225	231	237	244	251
	1,299	1,335	1,372	1,411	1,449	1,498	1,540	1,583	1,627	1,673
OPERATING SURPLUS/(DEFICIT)	110	139	49	72	108	103	148	198	213	274
FUNDED BY										
Transfers to/(from) Land Drainage Reserves	110	139	49	72	108	103	148	198	213	274
	110	139	49	72	108	103	148	198	213	274

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Land Drainage Services

	Budget 2006-07	Budget 2007-08	Budget 2008-09	Budget 2009-10	Budget 2010-11	Budget 2011-12	Budget 2012-13	Budget 2013-14	Budget 2014-15	Budget 2015-16
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	125	56	170	65	246	69	70	71	72	74
Level of Service Increases	350	1,573	370	114	606	121	144	575	132	136
Capacity Demand Increases	0	0	0	0	0	0	0	0	0	0
	<u>475</u>	<u>1,629</u>	<u>540</u>	<u>179</u>	<u>852</u>	<u>190</u>	<u>214</u>	<u>646</u>	<u>204</u>	<u>210</u>
Internal/External Loan Repayments	0	0	0	230	0	254	277	0	356	413
CAPITAL FUNDING REQUIRED	475	1,629	540	409	852	444	491	646	560	623
FUNDED BY										
Depreciation	326	329	335	337	339	341	343	345	347	349
Internal/External Borrowing	39	1,161	156	-	405	-	-	103	-	-
Transfers from Land Drainage Reserves	110	139	49	72	108	103	148	198	213	274
	<u>475</u>	<u>1,629</u>	<u>540</u>	<u>409</u>	<u>852</u>	<u>444</u>	<u>491</u>	<u>646</u>	<u>560</u>	<u>623</u>



Stormwater Services

Hauraki District Council undertakes to provide urban areas with stormwater systems capable of effectively managing water run-off from weather events. Management of stormwater is essential for protection of the community and environment. Stormwater systems include natural watercourses, man-made drains, open channels, reticulated pipe network and any other structures for accepting run-off from stormwater. Council maintains stormwater systems in the urban areas of Paeroa, Waihi, Ngatea, Turua, Kerepehi and Whiritoa.

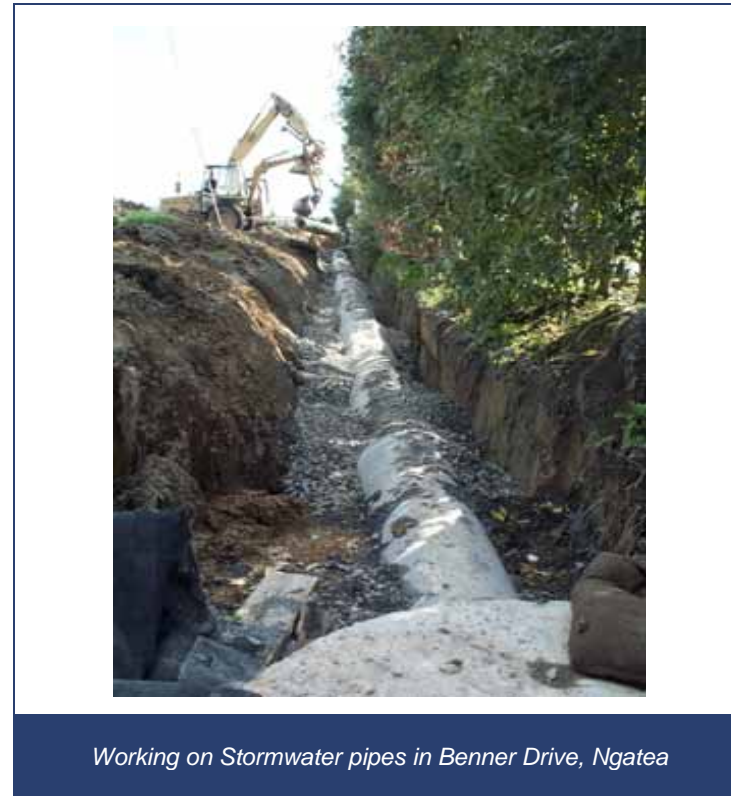
All stormwater systems, except Whiritoa, eventually discharge to either Waihou or Piako Rivers, directly via a tributary or via a land drain.

Waihi stormwater discharges by gravity flow directly to the Ohinemuri River, and then to the Waihou River. Paeroa and Ngatea discharge to Ohinemuri and Piako Rivers respectively, via outlets controlled by Environment Waikato floodgates and pump stations.

Council was granted comprehensive stormwater discharge consents for all urban areas in May 2003 for a term of 20 years, with five yearly review periods.

CURRENT LEVELS OF SERVICE

Location	Open Drains (m)	Pipes (m)	Manholes (#)	Pumps (#)
Paeroa	14720	22953	201	1
Waihi	12875	21006	279	-
Plains	3488	6995	116	-
Whiritoa	270	2342	15	-
Other	335	813	8	-
Total	31688	54109	619	1



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Stormwater Services

Council is currently further developing its Stormwater Asset Management Plan with a particular emphasis on Waihi and Paeroa.

Detailed information on the adequacy of the existing stormwater systems in the townships of Paeroa and Waihi is not sufficiently advanced to determine a specific programme of capital upgrades beyond 2007/08. In recognition of this, Council is also currently developing individual Catchment Management Plans (due for completion by 2007). The Catchment Management Plans will form an integral part of the Stormwater Asset Management Plan.

While Council is aware from observed flooding, particularly in Paeroa, that the existing stormwater system is of limited capacity it is not in a position to provide a detailed programme of capital works to address this issue beyond 2007/08. The Catchment Management Plans will allow for a forward programme of works to be developed for 2008/09 to 2015/16. However, given the demonstrable need to increase the capacity of the stormwater system Council's stormwater engineers have determined that, based on their knowledge of the system, the appropriate amounts to provide for upgrading of the stormwater systems are \$150,000 for Paeroa, and \$30,000 for Waihi, for each of those years.

The programme for the further development of the Stormwater Asset Management Plan and the stormwater Catchment Management Plans

includes an on-going programme of CCTV (closed circuit television) investigations that will assist the Council in determining the condition of the stormwater reticulation assets in Paeroa and Waihi.

SIGNALLING POSSIBLE CHANGE IN LEVELS OF SERVICE

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.

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 stormwater asset infrastructure and 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.

Council's District Plan identifies and protects floodways and ponding areas. During the Review of the District Plan these will need to be reassessed.

WHAT WILL SUCCESS LOOK LIKE?

Current Levels of Service	Measure	Method of Measuring Target	Baseline	2006-09 Target	2009-16 Target	Contribution to Community Outcomes
Quality customer communication, consultation and service provided.	Emergencies responded to within 3 hours.	Service request database.	New measure	>90%	>90%	
	Faults responded to within 48 hours.		New measure	> 90%	>90%	

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Stormwater Services

Current Levels of Service	Measure	Method of Measuring Target	Baseline	2006-09 Target	2009-16 Target	Contribution to Community Outcomes
Urban areas are provided with stormwater systems capable of effectively managing water run-off from weather events.	Habitable residential buildings are flooded during the year.	Complaints	New measure	<5 in 10 year event.	<3 in 10 year event.	Our communities support the viability of maintaining our rural lifestyles and values; Protecting the viability of our land for primary production; We value the provision of well-managed infrastructural services in our District; We support protecting our significant habitats and ecosystems.
The storm water infrastructure protects people and the environment.	Adopt Catchment Management Plans for Paeroa, Waihi, Ngatea and Whiritoa.	Plans adopted by Council.	New measure	Adopt by 30 June 2007		
	Adopt a stormwater development programme based on the findings of the catchment management plans for improvements to existing stormwater systems.	Programmes adopted by Council.	New-following adoption of Catchment Management Plans		30 June 2012	
	Stormwater resource consents comply with the Resource consent conditions.	Environment Waikato Compliance Report.	New measure	Compliance	Compliance	

COUNCIL'S PROPOSED STRATEGIES

- Consider the inclusion of the rural townships' stormwater operations into the District stormwater activity.
- Increase and improve the level of knowledge of existing stormwater systems.
- Develop and formalise an Event Management and Flood Control procedure.
- Participate in the investigation into the reduction of inflow and infiltration of stormwater into the reticulated sewerage network.
- Review the existing comprehensive stormwater discharge consents for the Environment Waikato Review due in 2008.
- Possible reprioritisation of works programme depending on the final content of the Stormwater Catchment Management Plans.
- During the life of this plan, Council will be considering the appropriateness of financial contributions or development contributions towards mitigating the downstream effects of stormwater disposal.
- To promote the development of environmentally friendly stormwater management systems.

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Stormwater Services

MAJOR CAPITAL EXPENDITURE

STORMWATER	2006/07 (\$'000)	2007/08 (\$'000)	2008/09 (\$'000)	2009-16 (\$'000)
Paeroa Urban Stormwater				
Arney Street		105		
Arney/Wood Street	10			
Arrow Street	35			
Marshall Street	150			
Wharf Street	150			
Waihi Urban Stormwater				
Morgan Park stormwater line renewal		49		
Whiritoa beach outfalls	12	13		
School Lane	50	63		
Barry Road				

WHAT ARE THE NEGATIVE EFFECTS?

The negative effects relating to the Stormwater activity include:

- Stormwater runoff from roads and land contains contaminants and sediments which eventually reach waterways potentially affecting water quality.

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Stormwater Services

WHAT IS THE COST OF OPERATING THE STORMWATER ACTIVITY?

	Budget 2006-07 \$000's	Budget 2007-08 \$000's	Budget 2008-09 \$000's	Budget 2009-10 \$000's	Budget 2010-11 \$000's	Budget 2011-12 \$000's	Budget 2012-13 \$000's	Budget 2013-14 \$000's	Budget 2014-15 \$000's	Budget 2015-16 \$000's
OPERATING EXPENDITURE										
Vegetation Control	9	26	25	26	26	27	28	28	29	29
Maintenance/Fencing/Culverts	35	36	38	39	40	41	42	43	44	45
Mechanical Cleaning	8	8	9	9	9	10	10	10	10	11
Floodgates	1	1	1	1	1	1	1	1	1	1
Pumps	6	6	6	6	7	7	7	7	7	8
Overheads	106	100	104	98	99	103	103	104	107	107
Other	90	90	76	78	80	82	84	86	88	90
Depreciation	215	219	235	245	248	262	273	273	288	295
Interest	64	91	105	106	103	102	100	98	97	95
	534	577	599	608	613	635	648	650	671	681
LESS OPERATING REVENUE										
Targeted Rates	436	474	497	528	535	543	558	565	573	586
General Rates	77	84	88	93	94	96	98	100	101	103
	513	558	585	621	629	639	656	665	674	689
OPERATING SURPLUS/(DEFICIT)	(21)	(19)	(14)	13	16	4	8	15	3	8
FUNDED BY										
Transfers to/(from) Stormwater Reserves	(21)	(19)	(14)	13	16	4	8	15	3	8
	(21)	(19)	(14)	13	16	4	8	15	3	8

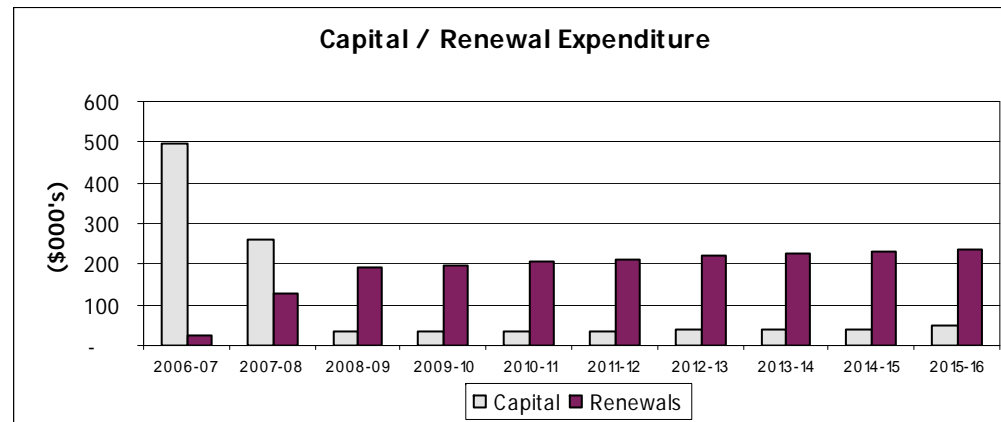
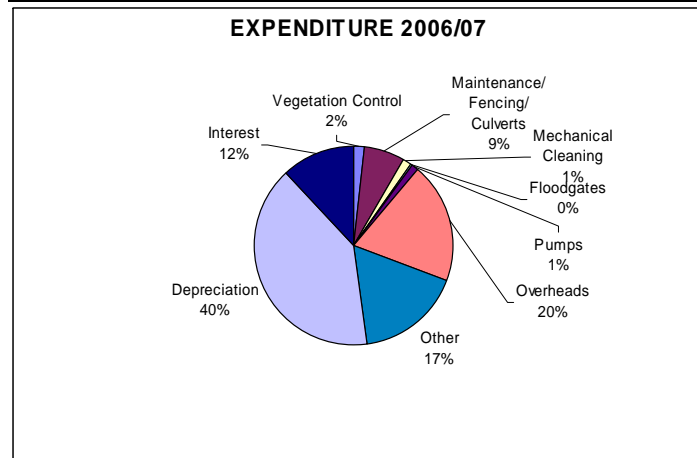
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Stormwater Services

	Budget 2006-07	Budget 2007-08	Budget 2008-09	Budget 2009-10	Budget 2010-11	Budget 2011-12	Budget 2012-13	Budget 2013-14	Budget 2014-15	Budget 2015-16
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	25	127	191	198	205	212	219	225	231	237
Level of Service Increases	349	259	33	34	35	36	38	39	40	47
Capacity Demand Increases	150	0	0	0	0	0	0	0	0	0
	<u>524</u>	<u>386</u>	<u>224</u>	<u>232</u>	<u>240</u>	<u>248</u>	<u>257</u>	<u>264</u>	<u>271</u>	<u>284</u>
Internal/External Loan Repayments	0	0	0	26	24	18	24	24	20	19
CAPITAL FUNDING REQUIRED	524	386	224	258	264	266	281	288	291	303

FUNDED BY

Depreciation	215	219	235	245	248	262	273	273	288	295
Internal/External Borrowing	330	186	3	-	-	-	-	-	-	-
Transfers from/(to) Stormwater Reserves	(21)	(19)	(14)	13	16	4	8	15	3	8
	524	386	224	258	264	266	281	288	291	303



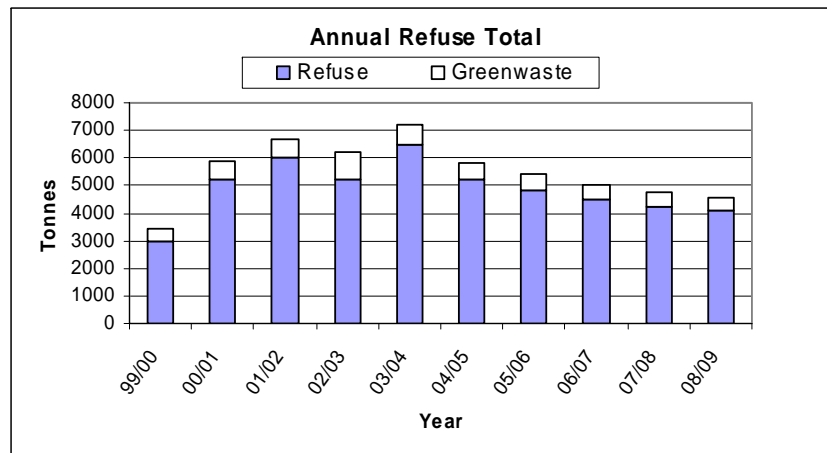
Solid Waste Services

This activity incorporates systems for the management of refuse collection, refuse disposal, waste reduction and recycling.

CURRENT LEVELS OF SERVICE

Services provided are:

- Refuse collections are carried out in the urban communities of Ngatea, Paeroa, Karangahake, Waikino, Waihi and Whiritoa on a weekly basis by contract.
- Refuse Transfer Stations (RTS) are situated at Grey Street, Paeroa and Dean Crescent, Waihi. Refuse that is not recycled is transferred to the sanitary landfill site at Tirohia.
- Waste reduction and recycling is encouraged, with collection points for recyclable waste provided at each transfer station.



SIGNALLING POSSIBLE CHANGE IN LEVELS OF SERVICE

The present refuse collection contract continues the methodology of the previous contract. The possibility and attractiveness of a prepaid bag system will be investigated and if a positive outcome results this methodology will be offered to Council.

All by-laws are to be reviewed by 2008. The Trade Waste By-law has still to be developed. The Solid Waste By-law has been implemented.

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 effective life of the Hauraki Community Plan, i.e. before 30th June 2009.

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Solid Waste Services

WHAT WILL SUCCESS LOOK LIKE?

Current Levels of Service	Measure	Method of Measuring Target	Baseline	2006-09 Target	2009-16 Target	Contribution to Community Outcomes
Refuse collections are carried out in the urban communities of Ngatea, Paeroa, Karangahake, Waikino, Waihi and Whiritoa on a weekly basis.	Missed Refuse and Recycling collections per year compared to the number of annual lifts.	Complaints register.	New	<1%	Decreasing	We support protecting our significant habitats and ecosystems.
Waste reduction and recycling is encouraged.	Implementation of Councils waste management plan.	Annual report to Council on Waste Management Plan.	Adopted plan 2002.	Continue to implement.	Continue to implement.	
	Percentage of separated green waste used beneficially.	Waste survey.	New	>80%	>85%	
Quality customer communication, consultation and service provided.	Customer satisfaction about how the refuse collection service is operated from Council's Triennial Residents' Survey.	Triennial Residents' Survey results.	75% 2004	>75%	Increasing	We want to have our say on our District's future.
	Customer satisfaction with how the refuse transfer station is operated from Council's Triennial Residents' Survey.	Triennial Residents' Survey results.	New	>75%	Increasing	

COUNCIL'S PROPOSED STRATEGIES

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.

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.

Council will continue to encourage waste minimisation in a supportive role and continue with its existing charging incentives.

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Solid Waste Services

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.

The frequency of Whiritoa's annual inorganic collection will reduce to every second year, following a positive response from the community at the annual community meetings. There will be no collection in odd numbered years.

A survey has been completed to assess the current make-up of refuse compared to what it was in 1996 to quantify trends in solid waste disposal.

MAJOR CAPITAL EXPENDITURE

Solid Waste	2006/07 (\$'000)	2007/08 (\$'000)	2008/09 (\$'000)	2009-16 (\$'000)
Paeroa RTS - slab replacement/ rehabilitation	48			23
Waihi RTS - mobile compactor	45			
Waihi RTS - roadway reseal				
Ngatea Recycling Depot		10		
Paeroa Tip rehabilitation			317	658
Plains Tip rehabilitation		123	106	
Waihi Tip rehabilitation	150	103		

MANAGEMENT PLANS FOR SOLID WASTE

Type of Plan	Description and objective
Waste Management Plan	This plan details the provision for the collection, reduction, reuse, recycling, recovery, treatment and disposal of waste in the District.

WHAT ARE THE NEGATIVE EFFECTS?

Negative effects that relate to Solid Waste activity include:

- Although recycling is increasing, the majority of solid waste is still disposed of into sanitary landfills.

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Solid Waste Services

WHAT IS THE COST OF OPERATING THE SOLID WASTE ACTIVITY?

	Budget 2006-07 \$000's	Budget 2007-08 \$000's	Budget 2008-09 \$000's	Budget 2009-10 \$000's	Budget 2010-11 \$000's	Budget 2011-12 \$000's	Budget 2012-13 \$000's	Budget 2013-14 \$000's	Budget 2014-15 \$000's	Budget 2015-16 \$000's
OPERATING EXPENDITURE										
Refuse Collection	375	389	404	423	430	443	456	473	479	490
Current Tip Sites	73	75	77	76	76	76	76	76	77	80
Transfer Stations	707	727	749	770	787	805	823	837	851	864
Other	80	45	41	42	72	44	45	52	46	47
	1,235	1,236	1,271	1,311	1,365	1,368	1,400	1,438	1,453	1,481
LESS OPERATING REVENUE										
Fees and Charges	637	655	674	692	708	724	740	753	765	778
Targeted Rates	375	389	404	423	430	443	456	473	479	490
General Rates	224	193	193	196	227	200	204	211	209	214
	1,236	1,237	1,271	1,311	1,365	1,367	1,400	1,437	1,453	1,482
OPERATING SURPLUS/(DEFICIT)	1	1	-	-	-	(1)	-	(1)	-	1
FUNDED BY										
Transfers to/(from) General Reserve	1	1	-	-	-	(1)	-	(1)	-	1
	1	1	-	-	-	(1)	-	(1)	-	1
CAPITAL EXPENDITURE										
Property, Plant and Equipment										
Renewals	48	0	0	0	0	0	23	0	0	21
Level of Service Increases	45	10	0	0	0	0	0	0	0	0
Capacity Demand Increases	0	0	0	0	0	0	0	0	0	0
	93	10	0	0	0	0	23	0	0	21
Landfill Liability	202	247	423	434	342	0	0	0	10	0
CAPITAL FUNDING REQUIRED	295	257	423	434	342	0	23	0	10	21

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Solid Waste Services

	Budget 2006-07	Budget 2007-08	Budget 2008-09	Budget 2009-10	Budget 2010-11	Budget 2011-12	Budget 2012-13	Budget 2013-14	Budget 2014-15	Budget 2015-16
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
FUNDED BY										
Depreciation	80	45	41	42	72	44	45	52	46	47
Internal/External Borrowing										
Transfers from/(to) General Reserve	215	212	382	392	270	(44)	(22)	(52)	(36)	(26)
	295	257	423	434	342	-	23	-	10	21

