

Wastewater Treatment Plant Project



STATEMENT OF PROPOSAL – Wastewater Treatment Plant Project

1.0 DETAILS OF THE PROPOSED AMENDMENT

This proposed amendment relates to the change in treatment plant process technology from the activated sludge plant to the consented biological trickling filter plant.

1.1 THE NATURE OF THE PROSPECTIVE FINANCIAL INFORMATION - CAUTIONARY NOTE

The prospective financial information contained in this Statement of Proposal is a forecast, and has been prepared on the basis of assumptions as to future events that the Council reasonably expects to occur, associated with the actions it reasonably expects to take as at the date the forecast was prepared.

The forecast relates to events and actions which have not yet occurred and may not occur. The actual revenue and expenditure for the period covered is likely to vary from the financial information presented and the variations may be material.

2.0 CURRENT SITUATION

Gisborne is committed to providing a new wastewater treatment plant to improve treatment of its domestic wastewater, to comply with strict quality requirements in Poverty Bay.

Currently the domestic wastewater is screened at Stanley Road milliscreening plant and then discharged down the existing outfall.

3.0 REASONS FOR THE PROPOSED AMENDMENT

In early 2007, the Council selected an alternative wastewater treatment plant process to form the basis of its resource consent applications under the Resource Management Act 1991. The alternative process selected comprised a biological trickling filter (BTF) plant, at Aerodrome Road site, instead of the previously planned activated sludge plant. Prior to this date, detailed consultation was held with the community of Gisborne and, through the Wastewater Adjournment Review Group formed in 2006, this revised treatment process was chosen from a range of options. In September 2007, the Minister for the Environment granted the new consents based on the BTF process.

This proposed amendment will not change the level of service proposed for wastewater treatment, it will merely provide the required treatment using a different method.

The consent also requires different plant and equipment to be provided at different times / years, to that previously proposed. There are therefore financial revisions that must be made to the budget to support the revised capital and operating expenditure of the BTF plant.



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4.0 RESULTING TEXT CHANGES TO THE 2006-2016 COMMUNITY PLAN

Page 7 - "Issues facing the District", Section 3.2 – Wastewater

Revise text as follows:

The existing wastewater treatment system for Gisborne City has to be upgraded. This will involve benefits, but also brings significant costs to ratepayers. Council has been granted a resource consent which it believes will address all the environmental effects and meet the cultural needs of the community, in a pragmatic way. The proposed system is based on treatment to a high standard using a "fixed film" Biological Trickling Filter process, which converts the human waste to plant matter (algae), prior to discharge down the existing ocean outfall. An additional solids separation and disinfection stage will be added a few years later, to remove an additional proportion of the plant matter remaining in the wastewater and to disinfect the waste prior to discharge. There are more wide ranging goals that form part of the consent, including investigating alternative use and disposal methods, and industrial wastewater reuse, and Turanganui a Kiwa water quality enhancement (investigating more wide ranging studies to improve the quality of Poverty Bay). Through best endeavours the ultimate goal is to remove the need for the ocean outfall by 2020. It is proposed that industrial trade waste will be treated at source and separated from the domestic wastewater.

Design of the wastewater treatment system is underway, with construction starting in 2009. Stage 1 of the wastewater treatment system will be completed by 2010, with Stage 2 (solids separation and disinfection) scheduled to be completed in 2012.

The project includes for capital works as follows:

	(\$000)	Year 1 2007	Year 2 2008	Year 3 2009	Year 4 2010	Year 5 2011	Year 6 2012	Year 7 2013	Year 8 2014	Year 9 2015	Year 10 2016	TOTAL
Wastewater Treatment- Stages 1 and 2	Proposed Amendment - WWTP	494	191	1,442	20,000	6,000	2,000	4,406				34,533
	Proposed Amendment - Capitalised Interest	0	0	41	535	1,163	1,372	1,525				4,636
Western Industrial Pump Station					210					40	310	560
Industrial Area Separation				350	3,420	1,360						5,130
Total WWTP and Western Industrial and Industrial Area Separation		494	191	1,833	24,165	8,523	3,372	5,931	0	40	310	44,859
Forecast Capital in 2006-2016 Community Plan		494	191	315	10,522	10,437					1,050	23,099

NOTE: If the proposed amendment is adopted, the amended figures only will be included in the amended Plan.

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Section 8.6, Page 61 - "Forecast Rate"

Revise text as follows:

Capital expenditure for the ten years of the Community Plant include a number of projects that upon completion will incur new operating costs:

- Wastewater Treatment Project – Stage 1 complete 2010, Stage 2 complete 2012.

Section 8.7, Page 62 - "Income and Expenditure"

5th sentence revise as follows:

The Capital Wastewater Treatment Project will have stage 1 completed in 2010 and Stage 2 completed in 2012, and will incur operating costs and depreciation and interest charges once it becomes operational.

Section 8.9, Page 64 - "External Debt and Interest"

4th Paragraph, revise as follows:

The wastewater treatment project has a significant impact on Council's debt levels. The industrial separation is an integral part of the wastewater project and has an estimated cost of \$350,000 (2009), \$3.42M (2010) and \$1.36M (2011).

Page 63 & 74 - Revise Financial Tables to read as shown in the table above.

Page 90 - "Resource Consents"

Last paragraph, revise as follows.

The Council has now been granted the suite of resource consent applications in relation to the proposed upgrade and renewal of the wastewater project.

Page 93 - "Wastewater Treatment System"

The Community Plan allows for the existing wastewater treatment system for the Gisborne City to be upgraded. Council has been granted a suite of resource consents for a Biological Trickling Filter (BTF) based treatment prior to discharge via the existing ocean outfall.

Council must ensure Stage 1 of the treatment plant is operational in 2010, and Stage 2 is operational in 2012.

Detailed information on the capital expenditure is included on pages 66 – 75. As the design of the treatment plant is still incomplete, there is still a reasonable level of uncertainty surrounding funding of the proposed wastewater treatment system.

It is assumed that the proposed wastewater treatment system will be partially funded by the accumulated capital rate, which has been transferred to the wastewater reserve, and the balance will be loan funded.

No government grant funding has been assumed in the proposed amendment.



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Failure to develop the wastewater treatment project within the timeframes set out in the resource consents could result in significant extra costs for the project and legal challenges.

Wastewater level of service will change when the wastewater treatment plant becomes operative. The proposed BTF plant should mitigate the environmental and cultural concerns regarding discharge of untreated human wastewater to ocean through the existing outfall.

Council has budgeted to construct Stage 1 of the Wastewater Treatment Plant at a capital cost of \$31m, and for this plant to be operative in 2010/2011.

Revise **Financial tables on page 158 – 165**, and table on Targeted Rates in Volume 2 Appendices (ii)

WASTEWATER ACTIVITY MANAGEMENT PLAN, VOLUME 3

The proposed amendment results in numerous changes to the Wastewater Activity Management Plan, as printed on pages 372 to 390 of the Amended 2006 - 2016 Community Plan, Volume 3. Therefore it should be deleted and replaced with the attached revised plan.

5.0 OPTIONS ANALYSIS [SECTION 77 LGA 2002]

In the course of its decision making the Council has considered all reasonably practicable options, then assessed those option against the following criteria:

- (i) The benefits and costs of each option in terms of the present and future social, economic, environmental, and cultural well-being of the district or region; and
- (ii) The extent to which community outcomes would be promoted or achieved in an integrated and efficient manner by each option; and
- (iii) The impact of each option on the local authority's capacity to meet present and future needs in relation to any statutory responsibility of the local authority; and
- (iv) Any other matters that, in the opinion of the Gisborne District Council, are relevant.

COMMUNITY OUTCOMES

The community outcomes are the community's vision for its future. Six high-level community outcomes were developed from a community consultation process undertaken in 2003/04. These outcomes are:

- ▶ Vibrant Communities
- ▶ Connected Communities
- ▶ Prosperous Communities
- ▶ Safe and Healthy Haven
- ▶ Positive Leadership
- ▶ Fair and Active Democracy

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Options Analysis for the Proposed Amendment relating to Wastewater Treatment Project

Options	Benefits in Terms of Present and Future Wellbeing	Costs in Terms of Present and Future Wellbeing	Promote Community Outcomes (Yes/No)	Statutory Responsibility	Other Matters
1. Status Quo: Continue developing wastewater treatment plant based on activated sludge process. (This is no longer an option as it does not comply with the consent conditions granted to Council.)	Social/Cultural Good health benefits to community & visitors from improved quality of Poverty Bay. Economic None Identified. Environmental Good level of treatment.	Social/Cultural Does not meet the cultural needs of the community. Economic Higher operating costs than BTF process. Environmental Does not meet cultural needs ie discharge of human waste to Poverty Bay is unacceptable.	Yes Vibrant communities Prosperous Communities Safe and Healthy Haven	Does not comply with recently granted Resource Consents.	This is not an option any longer due to the new Resource Consents that have been granted.
2. Proposed Amendment: Develop wastewater treatment plant based on biological trickling filter process (in accordance with new resource consent conditions)	Social/Cultural Meets cultural needs of community. Economic Lower operating costs than activated sludge plant. Environmental Improvement in the environment earlier than planned through activated sludge plant.	Social/Cultural None identified. Economic Additional funding required in earlier years than activated sludge plant. Environmental None identified.	Yes Vibrant communities Prosperous Communities Safe and Healthy Haven	C o m p l i e s with recently granted resource consents.	



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Volume 3 - Amended Activity Plan THE WASTEWATER ACTIVITY

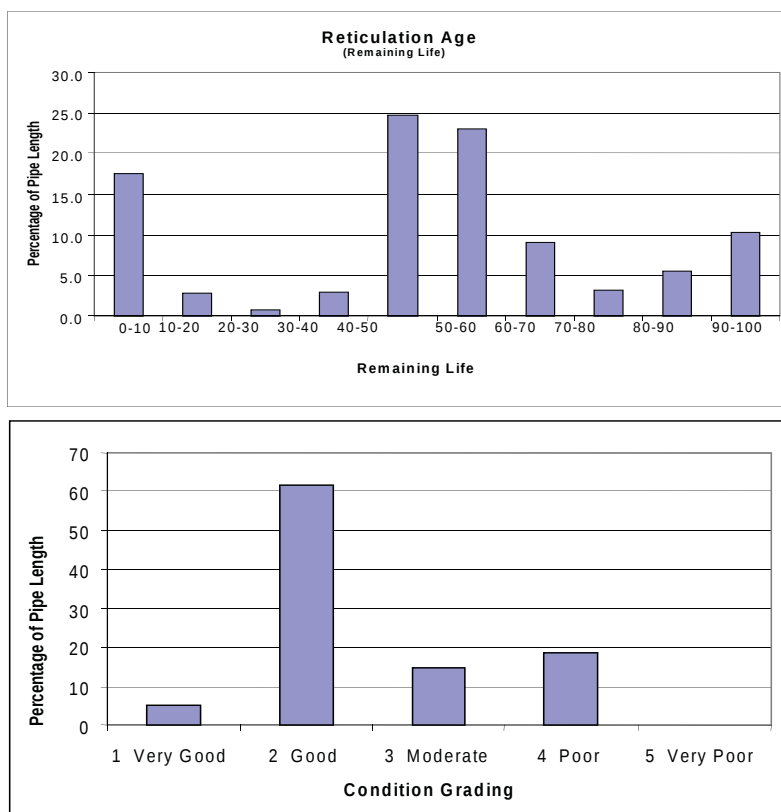
Executive Summary

OVERVIEW

	Gisborne	Te Karaka
Population served by the Wastewater Activity	29,400	522
Number of connections	13,637	168
Length of reticulation (km)	202	6
Number of manholes	2,427	76
Number of pumping stations	28	5
Value (DRC) \$000	39,518	1,187
Discharge volumes (average per day) m3/day	13,118	2,612
Treatment method	Millisccreens	Ox. Ponds

NB: Commercial and residential properties are charged per pan. Each pan charge has been taken as a connection.

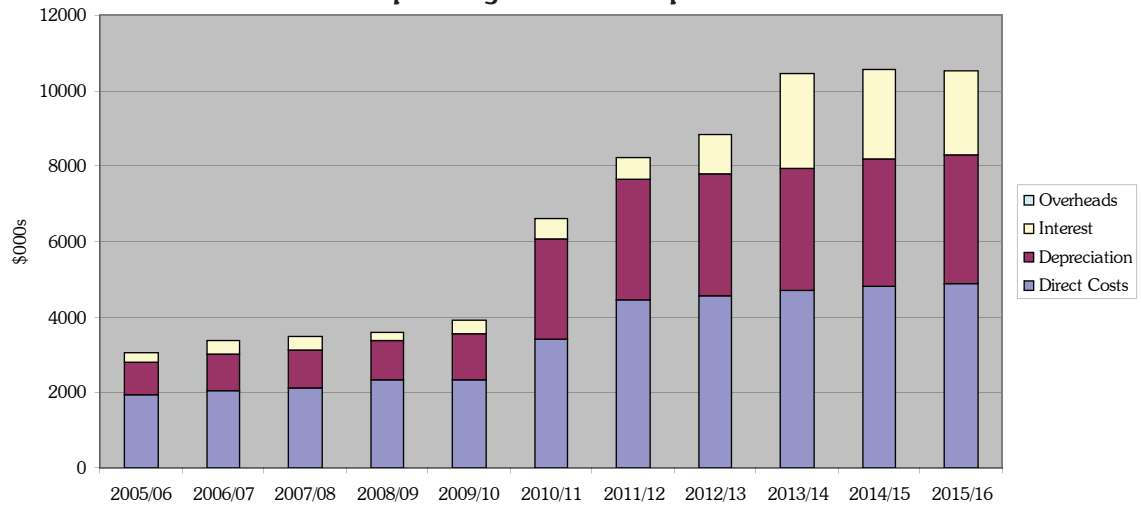
Reticulation Age (remaining life)



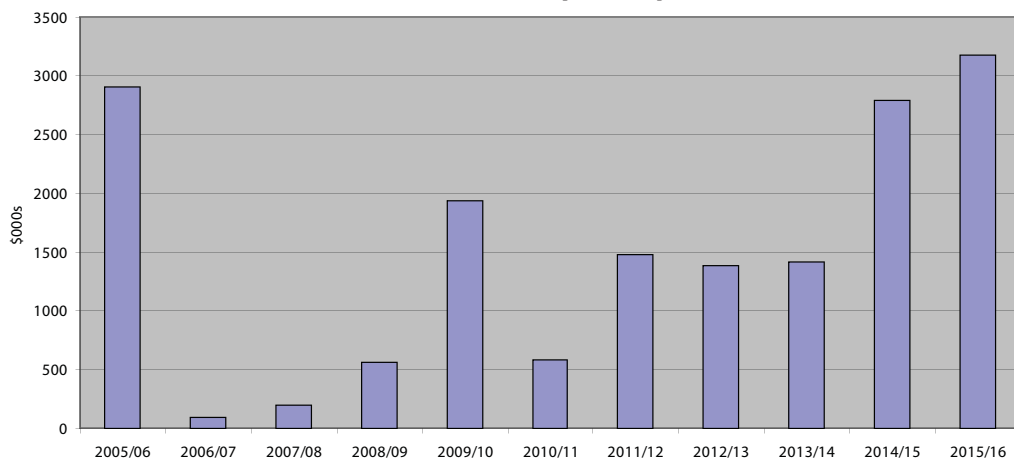
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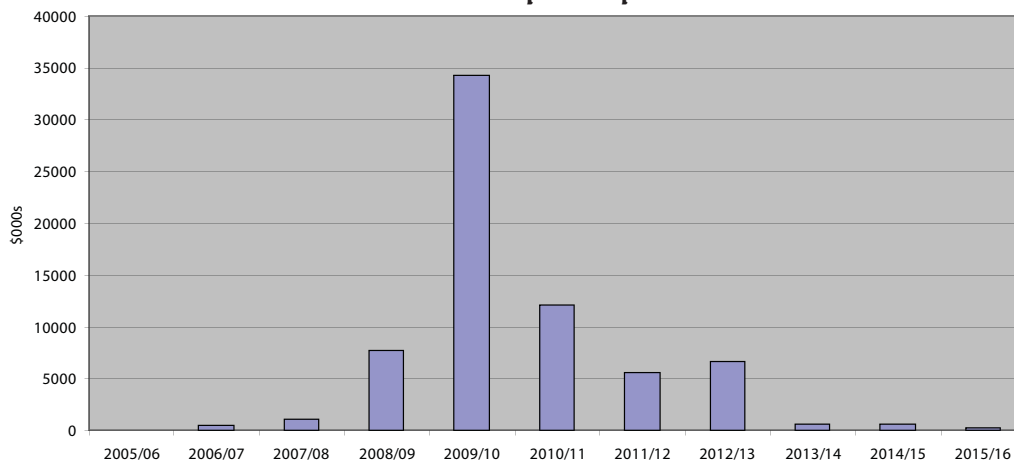
Operating Financial Requirements



Renewals Capital Expenditure



New Capital Expenditure





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Key Issues

The significant issues facing the District with wastewater are the now consented treatment upgrade for Gisborne City, provision of reticulated sewerage for Wainui, Okitu, Sponge Bay, Makorori and Makaraka and deferral of the renewal programme.

The reduction of stormwater into the sewer system to align with the commissioning of the proposed wastewater upgrade requires significant additional cost under the stormwater budget, this will impact on the ratepayer. Reticulation extensions to service additional industrial area and the residential areas of Wainui, Okitu, Sponge Bay, Makorori and Makaraka are distinct possibilities within the period of the Community Plan.

The sewer renewal programme has been deferred due to the high cost impact on the ratepayer of the capital upgrades in wastewater and stormwater, the wastewater levy, the inflow infiltration programme to reduce sewer overflows, level of debt servicing through the renewal period and the impost on ratepayers of repairing their own private laterals. This is believed to be sustainable and is prudent financial management on behalf of the community.

Activity Description and Service Levels

1.0 INTRODUCTION

1.1 Background and Rationale for the Council's Involvement

The purpose of this Activity Management Plan is to demonstrate that the Gisborne community's expectations for the sustainable management of the wastewater system assets are being met. The plan contains expenditure forecasts and supporting information for wastewater assets owned by Council. Council's Wastewater Assets represent a major investment by the community and are managed by the Council's Engineering and Works Department.

The Local Government Act 1974, Section 122L(b), required the Council to undertake a review of all its current activities in order to identify its "core business" activities. This process identified ownership and management of the wastewater system to be part of Council's core business. The public good component of the wastewater system was judged to be extremely high, as it is, by necessity, non-excludable and difficult to charge for on a user pays basis. The following factors were also considered as justifying Council's provision of the wastewater system:

- Public expectation.
- Council delivery represents lowest net cost to community.
- Discontinuation is not practicable.
- Alternative providers do not exist, or unlikely to exist with an alternative network.
- Detrimental environmental, health, economic or social consequences may arise from non-provision.

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1.2 Community Outcomes to which the Activity Primarily Contributes

Table1

Community Outcomes		How the Wastewater Activity Contributes
Connected Communities	Access to all essential goods and services	Provides a modern and convenient to use wastewater reticulation system.
Safe and Healthy Haven	Freedom from health risks and harm	Protects public/private property and public health by providing a wastewater collection system and safe disposal of effluent
	Guardianship of our environment for future generations	Protects the physical environment (particular beaches and rivers) through the treatment and discharge of effluent through approved methods.
Positive Leadership	Positive stewardship and improvements in infrastructure promoting environmental sustainability.	Provides a wastewater system managed on a commercial basis, with the intent of maintaining and improving the current infrastructure and achieving environmental sustainability

1.3 The Activity Goal and Principal Objectives

The Wastewater activity goal is:

- a. To provide an efficient and effective wastewater reticulation system where agreed with the community.

Council's principal objectives are:

- a. To protect and promote public health by providing a wastewater collection system and safe disposal of effluent.
- b. To protect the physical environment through the treatment and discharge of effluent through approved methods.
- c. To provide the underlying sanitary infrastructure required to support the economic base of the community.

2.0 FUTURE PLANNED LEVELS OF SERVICE, PERFORMANCE MEASURES, and LINKAGE WITH COMMUNITY OUTCOMES

The Council will continue to monitor and report its actual performance against the following measures:



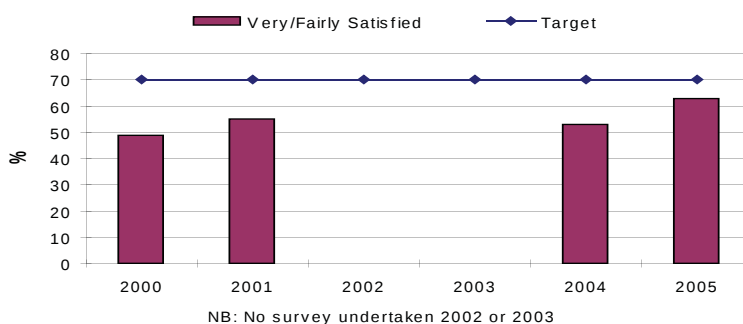
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Table 2
Performance Measures

Activity	Performance Measure	Target
EXTERNAL PERFORMANCE MEASURES (to be reported against in the Annual Report)		
Providing a wastewater system that is responsive to customer needs.	The percentage of the public who are very/fairly satisfied with the sewerage system (as measured by the annual Communitrak survey)	70%
	The percentage of requests for service resolved within target timeframes	95%
Providing a wastewater system that does not compromise the water quality of rivers and beaches.	Council meets all its outfall consent conditions	YES
	The annual number of events where sewerage is discharged from Council's reticulation into rivers or streams	< 5

Activity	Performance Measure	Target
INTERNAL PERFORMANCE MEASURES (to be used as internal management tools)		
Providing a wastewater system that does not compromise the water quality of rivers and beaches.	Have and implement an active Inflow and Infiltration Programme inspecting private property for illegal stormwater entry to 2010.	YES
	Complete current stormwater upgrade programme by 2012 and report on progress at least once every three years.	YES
Providing a wastewater system that is well maintained, with infrastructure improvements as required.	Obtain resource consent for proposed wastewater upgrade	YES
	Have a current approved Activity Management Plan	YES
	Have a current approved Sanitary Assessment as required by the LGA 2002	YES
	Have a current approved Waste Plan	YES

Table 3
Reporting Actual Performance Results

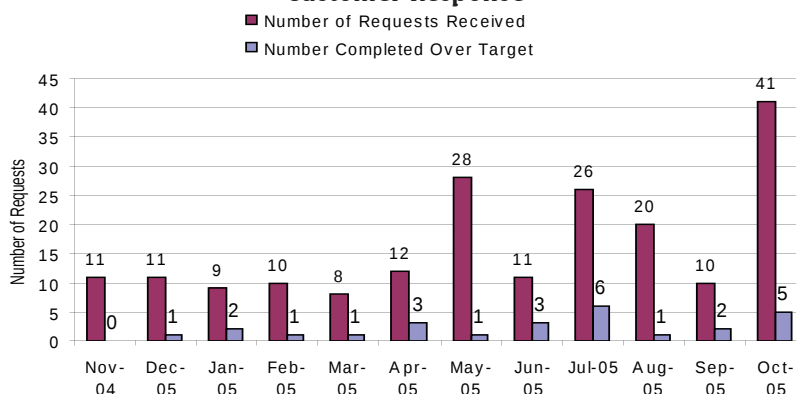


Objective: Provide Satisfactory System. **Progress:** 63% very/fairly satisfied. No sewerage overflows on private property.

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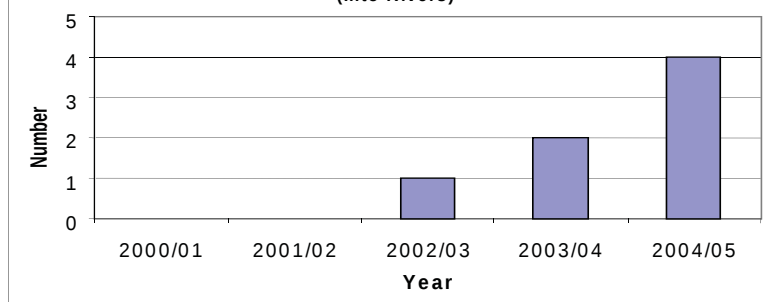


Customer Response



Objective: Meet customer needs. **Progress:** 97% of requests for service were resolved within target completion timeframe in 2004/05.

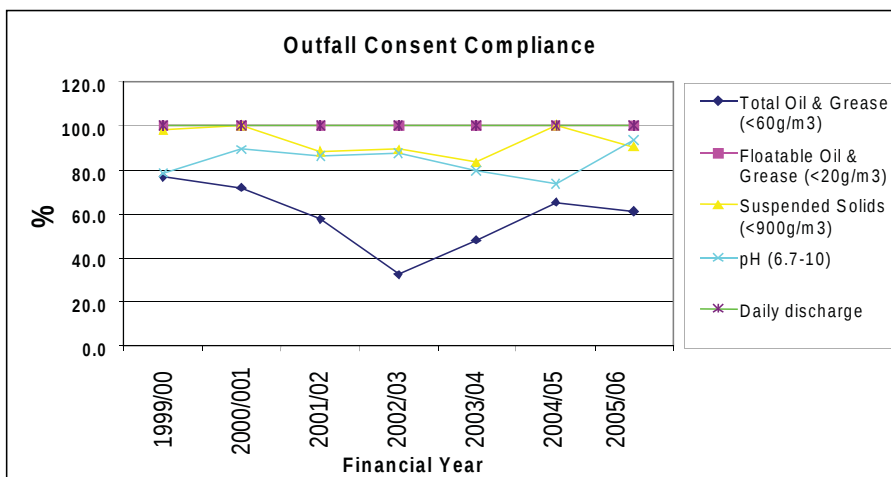
Overflows/Spills (Into Rivers)



Objective: River Water Quality. **Progress:** The number of events where sewerage is discharged from Council's reticulation into rivers and streams shows an increasing trend. This is a result of wetter winters. An improvement programme is scheduled to be completed by 2012.

Note: Private Property Overflows do not differentiate between who caused the overflow, resident or Council.

Outfall Consent Compliance





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The degree to which progress has been made towards the achievement of the community outcomes to which wastewater primarily contributes will also be reported in the Annual Report each year in the following form (Table 4).

Table 4

Overall Progress Towards Achievement of Community Outcomes to which the Wastewater Activity Primarily Contributes

Outcomes		How the Wastewater Activity Contributes	Measure	Performance			Rating				
				Targets 2006/07	Average Last 5 Years	Actual 2004/05	Much Worse	Worse	No Change	Better	Much Better
Connected Communities	Access to all essential goods and services	Provides a modern and convenient to use wastewater reticulation system.	The percentage of the public who are very/fairly satisfied with the sewerage system (as measured annually by the Communitrak survey)	70%	55%	63%					✓
			The percentage of requests for service resolved within target time	95%	93%	97%				✓	
Safe and Healthy Haven	Freedom from health risks and harm	Protects public/private property and public health by providing a wastewater collection system and safe disposal of effluent	Council meets all its Outfall consent conditions	YES	NO	NO			✓		
	Guardianship of our environment for future generations	Protects the physical environment (particularly beaches and rivers) through the treatment and discharge of effluent through approved methods.	The annual number of events where sewerage is discharged from Council's Reticulation into rivers or streams	< 5	2.2	4		X			

3.0 THE EXISTING SITUATION DESCRIBED

3.1 Overview

The current wastewater system is being prioritised by the stormwater upgrades to reduce the amount of stormwater entering the sewer system and the wastewater treatment upgrade. The financial burden on the ratepayer is significant and as a result prudent financial management is being exercised by delaying the renewal programme. The level of service will change when the wastewater treatment plant becomes operative and on completion of the stormwater and wastewater treatment projects mentioned a more active approach to the renewal programme will be taken. Continual monitoring of the renewal programme is required.

The following reports, Steering Group recommendations, working parties and Council resolutions have been or are being considered and/or actioned when looking at the Wainui, Okitu, Sponge Bay and Makorori being reticulated.

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1. Council's Urban Coastal Strategy findings
2. Makorori working party recommendations
3. Council's 3-Waters Assessment
4. Special Steering Group for Wainui, Okitu and Sponge Bay 2006 Recommendations
5. Council instructed staff to carry out further design, cost and funding investigations
6. Staff report (November 2007) to Council and the Council resolution

Nationally the Government has targeted this region and others through the subsidy scheme for water and wastewater to pursue community based upgrades. The amount of funding is based on the Deprivation Index, which measures the overall level of economic deprivation in an area and is calculated using certain Census socio-economic indicators. The Gisborne district fares poorly on this measure, thus meeting the Governments requirements for receiving financial support to assist with capital costs. However operational costs are ongoing for the communities and currently not part of the subsidy scheme. These schemes will continue to be monitored as to their suitability for our communities.

3.2 Public Wastewater Services

Table 5
Overview of the Public Wastewater System

Factor	Gisborne	Te Karaka
Population Served	29,400	522
Properties connected (no.)	13,637	168
Full charge	264	35
Availability charge		
Length of Reticulation (kms)	202km	6km
Manholes (no.)	2427	76
Pump Stations (no.)	28	5
Depreciated Replacement Value (\$000) 30 June 2005	37,598	1,187
Replacement Value (\$000) 30 June 2005	77,528	1,654
No. of Connections	10,374	160
Method of Treatment	Milli-screens	Oxidation Pond
Annual Discharge Volume	4,788,056	28,580
Discharge Volume per Connection (m ³ /year) Domestic	241	180



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3.3 Private Wastewater Services

Table 6
Communities not served by a
Reticulated Wastewater System

Name of Community	Population	Number of Households	How Wastewater Collected and Disposed of
Hicks Bay	237	81	Individual Septic Tank
Makaraka	360	132	Individual Septic Tank
Manutuke	408	65	Individual Septic Tank
Matawai	129	42	Individual Septic Tank
Muriwai	222	60	Individual Septic Tank
Patutahi	318	99	Individual Septic Tank
Ruatoria	837	186	Individual Septic Tank
Te Araroa	174	62	Individual Septic Tank
Te Puia Springs	129	51	Individual Septic Tank
Tikitiki	174	54	Individual Septic Tank
Tokomaru Bay	462	104	Individual Septic Tank
Tolaga Bay	867	276	Individual Septic Tank
Wainui / Okitu / Makorori	1,412	531	Proposed Change to Reticulation
Whatatutu	174	51	Individual Septic Tank

Operations, Capital Development and Funding

4.0 Maintenance and Operating

4.1 How the Wastewater Assets are Owned and Operated

Gisborne District Council currently owns the Gisborne City and Te Karaka wastewater networks on behalf of those communities. There are no plans to change the ownership of these networks.

The day-to-day management of the Wastewater Systems is carried out by the Council's Engineering and Works Department. The operation of Council's wastewater treatment plants is undertaken by Council's maintenance contractor. Routine maintenance is completed under contract.

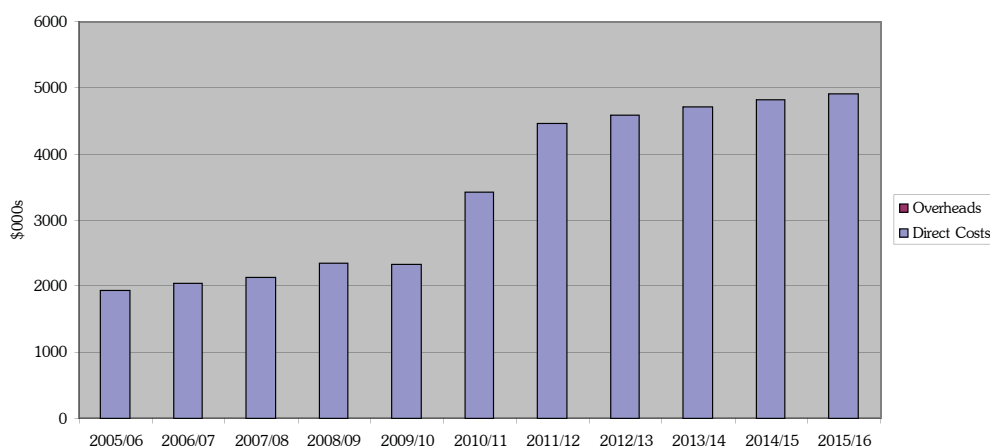
Design functions are contracted through Opus International Consultants.

To maximise efficiency, consultancy input is obtained for most design and capital works supervision with Council staff overseeing maintenance, asset management functions, engaging consultants and monitoring their progress.

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Table 7
Direct Maintenance and Operating Costs



4.2 Maintenance and Operating Issues

Significant increases in maintenance and operating costs will occur due to the establishment of a biological trickling filter (BTF) wastewater treatment plant for Gisborne City and the reticulation of residential and industrial areas. This will also involve different types of wastewater technologies and variations to the existing maintenance contracts.

With the planned deferred renewal programme some additional costs for maintenance can be expected in additional blockages and spot repairs to the mains. This is able to be accommodated within the existing budgets due to additional savings resulting from reducing the amount of stormwater entering the sewer system which are causing additional maintenance costs currently.

To assist the management of assets Council has asset management systems. These ensure appropriate processes are in place, information systems are available to store and analyse data, and adequate data is available. The key information systems in place are the Hansen IMS asset management system, the ArcInfo geographic information system and the Origen financial management system. Council is well advanced in its use of the Hansen IMS asset management system and has good asset management data and records.



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Table 8
Overall Age and Material Type

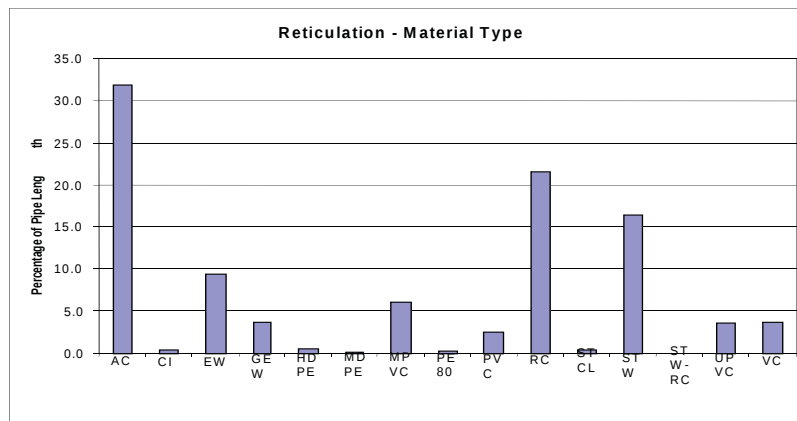
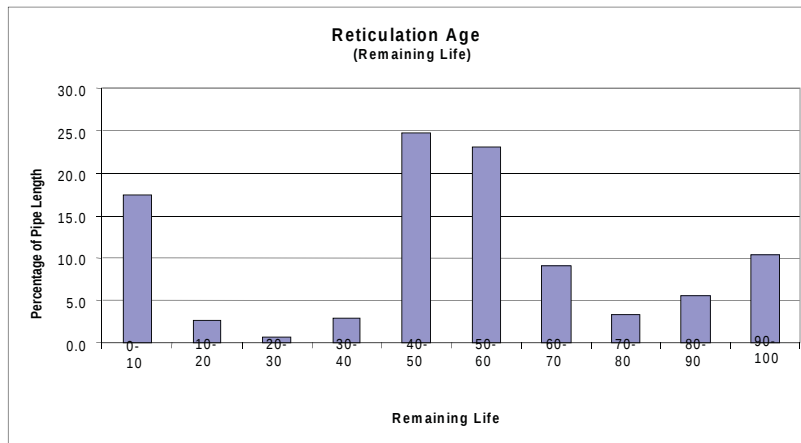
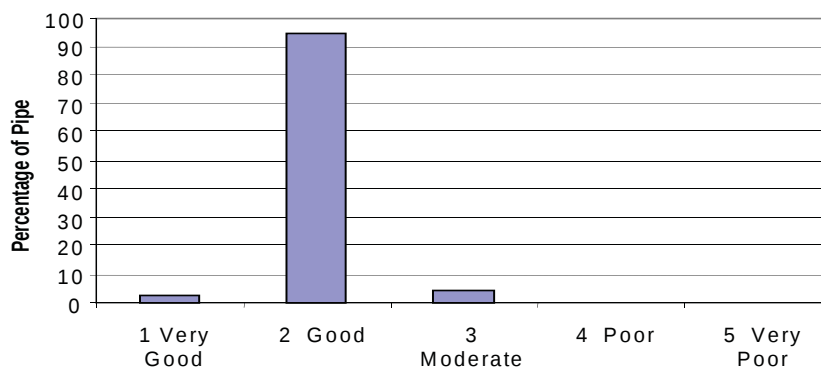


Table 9
Overall Condition and Performance



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4.3 Business Continuity / Emergency Management

Business continuity and emergency management planning is programmed for completion by July 2007, and the results will be incorporated into the next revision of the Activity Management Plan. This aligns with the statutory requirement to have disaster recovery plans under the Civil Defence Emergency Management Act 2002 (CDEMA) and will complete the work currently being undertaken on Lifelines.

A review of the potential risks on the current network to ensure continued operation has been completed and the recommendations are currently being implemented. Key areas have standby power and Council owns and operates a number of portable generators. All pump stations have an effluent bypass should problems occur. Multi level support is available from generators, pumps and suction trucks. Council has 2 electrical contractors who are both familiar with the complete network. The maintenance contractor is a national company and is able to access additional external resources and equipment in an emergency.

Council's records are both electronic and paper based and frontline staff have sufficient information on hand to respond to critical emergencies. Critical sites have detailed information available onsite to cover emergency issues.

5.0 RENEWALS CAPITAL EXPENDITURE and DEPRECIATION

Table 10 compares the forecasted renewal requirements and the amount of depreciation funds available. This shows Council is deferring the renewal programme due to the high imposit of costs on the ratepayer from the wastewater upgrade, stormwater upgrade, inflow and infiltration programme, wastewater levy and the additional burden on ratepayers of repairing their own private laterals.

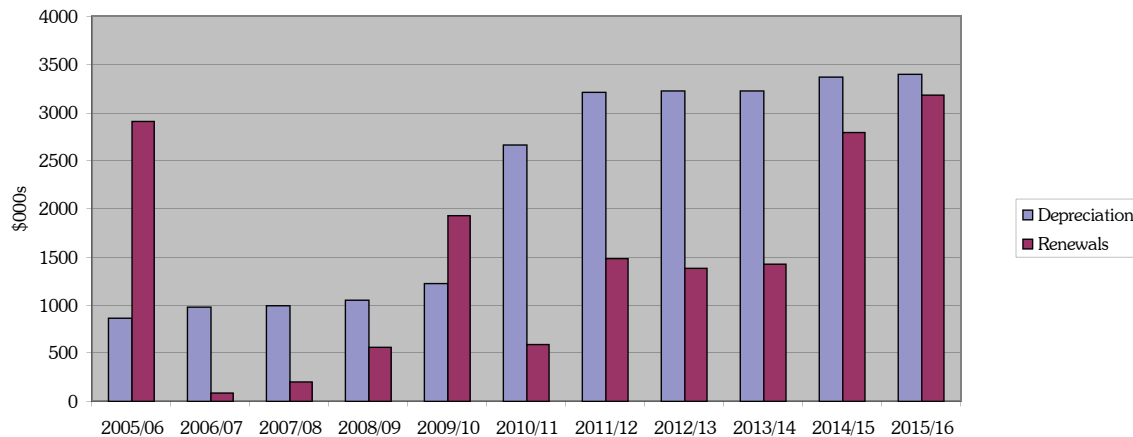
The major requirement occurs in Year 9 and 10 and it is intended to smooth out the expenditure from Year 11 to Year 20. This has a two fold benefit in reducing the financial burden on the ratepayer and avoiding the "feast and famine of work". Council cannot afford to lose local expertise or have escalated costs due to shortage of contractors locally to undertake the work for the Township reticulations, wastewater upgrade and renewals.

Table 10 shows that funding will meet the renewal programme but does not account for the additional depreciation that will occur from the township reticulation and wastewater upgrades although these assets will have no cash requirement for 50-100 years. Additional funding will also be looked at from other utility areas where requirements for funding in the 11-20 years are low.



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Table 10
Depreciation v Renewal Cost



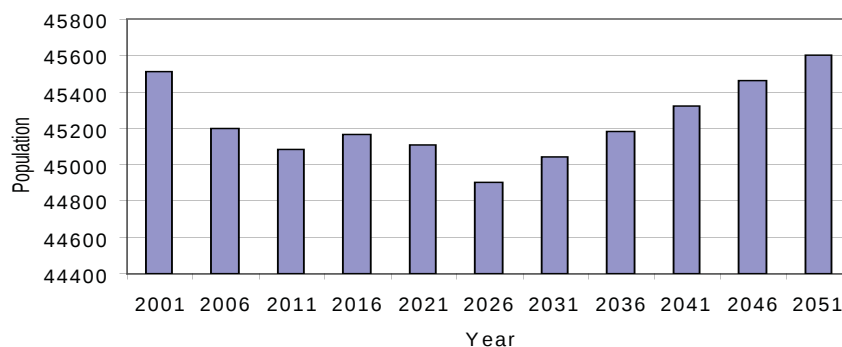
6.0 FUTURE DEMAND

The following tables illustrate the extent to which the Council predicts the current level of demand for wastewater is likely to change over time.

Over the next forty to fifty years Gisborne District is expected to see a small decrease in population, followed by a gradual, but consistent increase. These changes will be driven by population growth in the urban areas of Gisborne, while the population of rural Gisborne is expected to decline over the next twenty years before stabilising (source: Gisborne District Council's Growth Model).

The proposed wastewater capital-upgrading programme will address known capacity problems in the interceptors, and also provide for further wastewater treatment and disposal processes. These upgrades will be examined and the possible effects of higher permitted housing densities, and inflow / infiltration, factored into designs. Industrial separation allowing direct discharge through the Marine Outfall will provide additional capacity within the Western Interceptor and should meet any future growth.

Table 11
Population Served
Projected Population for the whole of the Gisborne District
2001-2051

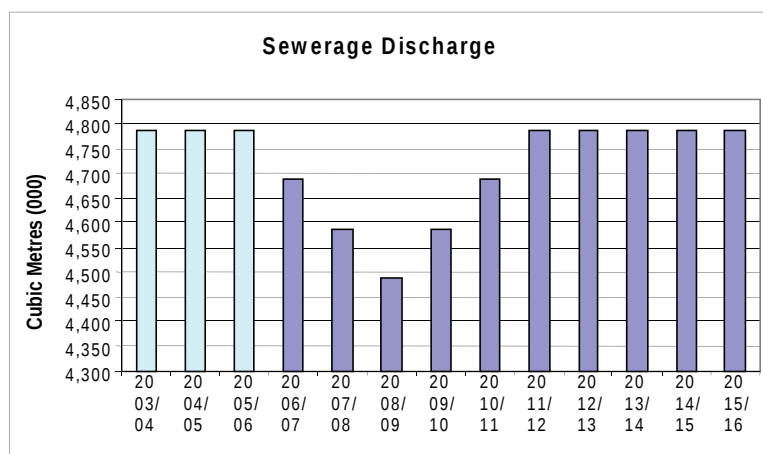


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The impact of reticulating Wainui, Okitu, Sponge Bay and Makorori has been considered and feasibility stage investigations and costs have been determined and included in the costs provided.

Table 12
Wastewater Discharge Volumes (Cubic Metres)



The reduction of wastewater discharge reflects the work being undertaken by the inflow and infiltration programme plus the stormwater upgrades which reduces the amount of stormwater entering the sewer system. The increase in volumes then reflects the additional discharge from Wainui, Okitu, Sponge Bay, Makorori and Makaraka townships.

The sanitary assessments required under the LGA 2002 did not identify any future demand requirements for reticulation that have not been allowed for as part of the new capital work.

7.0 NEW CAPITAL EXPENDITURE

7.1 Proposed Future Capital Works Programme

Planned new capital works are shown in the table below.

Over the next ten years just over \$69 million will be spent on new Capital. The largest portion is a result of the consented BTF wastewater treatment plant.

Table 13
Capital Expenditure (000)

DETAILS	2007 Year 1	2008 Year 2	2009 Year 3	2010 Year 4	2011 Year 5	2012 Year 6	2013 Year 7	2014 Year 8	2015 Year 9	2016 Year 10
WASTEWATER										
Industrial area separation			350,000	3,420,000	1,360,000					
Makaraka water and wastewater reticulation				150,000	1,540,000					
Moss Road pump station						321,000				

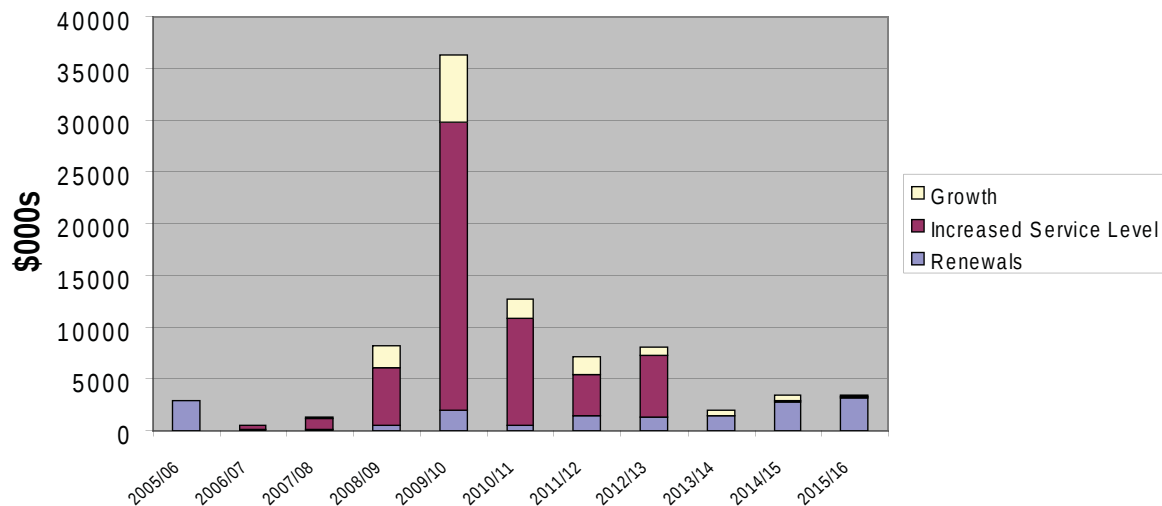


Wastewater Treatment Plant Project

DETAILS	2007 Year 1	2008 Year 2	2009 Year 3	2010 Year 4	2011 Year 5	2012 Year 6	2013 Year 7	2014 Year 8	2015 Year 9	2016 Year 10
Nelson Road sewer main		128,500								
Permanent sewer flow loggers				90,000		94,000	96,000	101,000	103,500	105,800
Pump station renewals	90,000		90,000			106,950	250,000	110,000	262,000	115,000
Sewer main replacements		150,000	118,100	200,000	200,000	1,700,000	1,748,000	1,793,600	1,834,800	1,875,900
Sponge Bay reticulation									500,000	1,000,000
Subdivision support		60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Taruheru block						411,250			700,000	
Wainui wastewater reticulation		825,000	6,100,000	11,200,000	1,800,000	500,000				
Wainui wastewater project capitalised interest			132,805	455,868	629,276	596,324				
Wastewater design for Makauri plan change			60,000							
Wastewater treatment project	493,600	191,000	1,442,000	20,000,000	6,000,000	2,000,000	4,406,000			
Wastewater treatment project capitalised interest			40,955	535,340	1,163,206	1,372,215	1,524,587			
Western industrial pump station				210,000					40,000	310,000

The rows highlighted in grey are changes resulting from the proposed amendments.

Table 14
Total Capital Costs



7.2 Asset Retirement / Disposals etc

Currently there are no known disposal issues relating to assets, normal accounting procedures are followed where existing assets are renewed and the old assets disposed of. No assets have been identified as not being replaced when their economic life has been reached.

Wastewater Treatment Plant Project



There are no current plans to dispose (sell) any part of the existing wastewater system, the new treatment plant may have private involvement but this has not been decided nor formally discussed and is not factored into this plan.

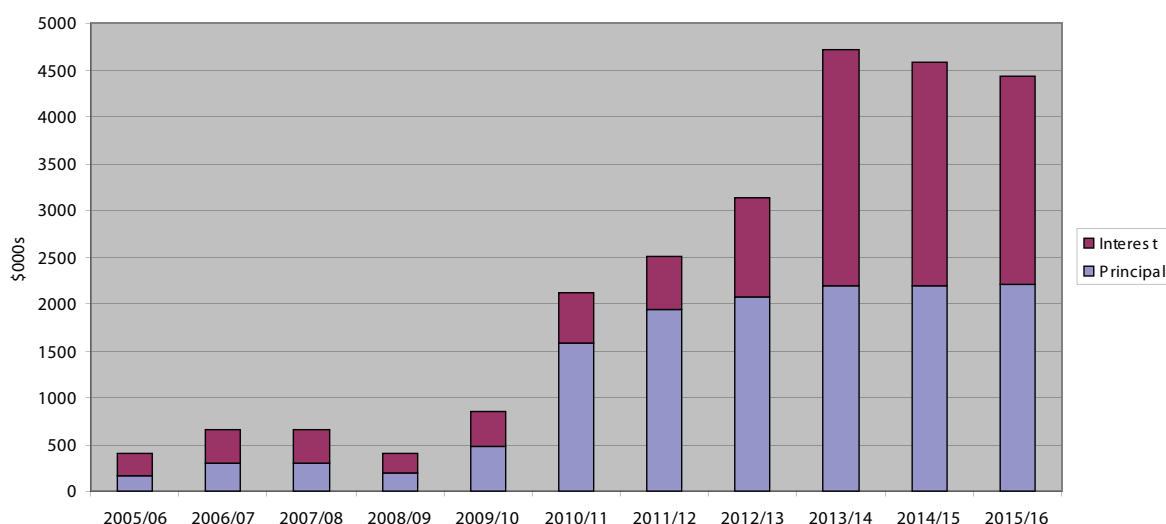
7.3 How Capital Works are to be Funded

There are two critical funding issues, development contributions and government subsidy.

- ▶ The Sanitary Works Subsidy Scheme (SWSS) provides funding assistance for smaller communities. The operational funding requirements are such that for most Gisborne communities they are unsustainable.
- ▶ A new Development Contributions Policy, if adopted, will come into effect from 1 July 2008.

Ratepayers have been levied for the future wastewater upgrade since 2003 with the amount increasing each year until the wastewater plant is commissioned in 2010. This shows the communities commitment to improving the discharge standards and also softens the impact of the upgrade by reducing the level of debt this will create.

Table 15
Loan Servicing Requirement



7.4 Capital Works Policies

The Capital Works Programme is being developed in accordance with the Local Government Act 2002 requirements. This will be a structured process that ensures all alternative options are considered, justification for the works is recorded, and the consequences of not undertaking the work are assessed. Prudent financial management is being exercised with the deferment of the capital renewal programme.



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7.5 Other Capital Works Issues

There are no other known capital works issues.

8.0 FUNDING THE ANNUAL OPERATING COST – ‘WHO’ PAYS?

8.1 Financial Summary

Table 16
Summary of Forecasted Financial Performance
(\$000) – (10 years)

2005/06	Statement of Financial Performance (\$000)	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
OPERATIONS											
	Operating Revenue										
48	Activity Revenue	39	40	42	44	45	47	48	49	50	51
0	Grants & Subsidies	0	0	0	0	0	0	0	0	0	0
0	Other Revenue	0	0	0	0	0	0	0	0	0	0
0	Internally Charged Activity Revenue	0	0	0	0	0	0	0	0	0	0
48		39	40	42	44	45	47	48	49	50	51
	Operating Expenditure										
1939	Direct Costs	2043	2128	2342	2328	3413	4466	4577	4717	4822	4900
861	Depreciation	976	994	1051	1224	2658	3202	3216	3221	3363	3401
243	Interest	363	360	214	367	528	572	1057	2519	2380	2227
0	Overheads & Indirect Costs	0	0	0	0	0	0	0	0	0	0
3043		3382	3482	3607	3919	6599	8240	8850	10457	10565	10528
2995	Cost of Service	3343	3442	3565	3875	6554	8193	8802	10408	10515	10477
	Funded by:										
2995	Rates Income	3348	3501	3582	3876	6553	8194	8802	10408	10515	10477
0	Internal Allocations	0	0	0	0	0	0	0	0	0	0
0	Net Transfer from/(to) Reserves	0	0	0	0	0	0	0	0	0	0
0	Depreciation Unfunded	0	0	0	0	0	0	0	0	0	0
2995		3348	3501	3582	3876	6553	8194	8802	10408	10515	10477
0	Funding Surplus/(Deficit)	5	59	17	1	-1	1	0	0	0	0
CAPITAL											
	Capital Expenditure Capital										
2903	- Renewals	90	197	558	1935	584	1477	1385	1419	2792	3176
0	- Increased Level of Service	494	1016	5499	27843	10322	3957	5851	101	95	106
0	- Growth	0	81	2216	6483	1787	1668	789	484	554	125
167	Loan Repayments	293	303	193	481	1587	1939	2078	2199	2199	2213
3070		877	1597	8466	36742	14280	9041	10103	4203	5640	5620

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2005/06	Statement of Financial Performance (\$000)	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Funded by:											
929	Rates Income	1245	1557	1868	3847	4158	1649	1649	1649	1649	1649
0	Grants & Subsidies	0	0	0	0	0	0	0	0	0	0
0	Other Capital Income	0	413	587	592	599	633	633	643	642	633
2903	Loans	0	521	5765	22102	6957	2736	2436	101	378	116
167	Transfer from Depreciation Reserve	383	500	388	2047	3793	3457	4365	2930	4027	4690
-929	Transfer from Other Reserves	-751	-1393	-141	8154	-1228	566	1020	-1119	-1057	-1468
3070		877	1598	8467	36742	14279	9041	10103	4204	5639	5620

8.2 Council Funding Stream

Funding Stream 70 - Sewer and Wastewater Treatment and Disposal	Description of Activity - Treat and dispose sewage for Commercial & Domestic users. Reason why Activity is Engaged in - Discretionary. - Promote Public Health. Benefits Accruing - Public Health to whole community. - Convenience of users connected. Funding Sources and Mechanisms 100% Targeted Rates to people connected to the system.
Funding Stream 71 – Wastewater Capital Rate	Description of Activity - Collect capital contributions in advance of major capital expenditure for wastewater processing and outfall. Reason why Activity is Engaged in - Discretionary. - To minimise future debt requirement. Benefits Accruing - The whole community in minimising future debt requirements Funding Sources and Mechanisms 100% Fixed Targeted Rates on Rating Units as follows: \$26 per City property, increasing by \$26 per year \$7 per Semi-urban/buffer zone properties, increasing by \$7 per year \$4 per Rural property, increasing by \$4 per year

8.3 Schedule of Fees and Charges

The following Fees and Charges apply to the Wastewater Activity:

- Council levies trade waste fees based on the charging formula contained in the Trade Waste Bylaw. The charges for Conditional trade wastes are based on average daily rate of discharge; Suspended Solids; Total Oil and Grease; and Biochemical Oxygen Demand.



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A review of the Trade Waste Bylaw is required by July 2007, the charging mechanism will change to reflect the increased treatment costs and also the Industrial waste separation.

- All other charges are covered by the rate strike. Rates for wastewater are charged per connected property and a pan charge.
- Standard plumbing and drainage charges for Building Consents apply.

Environmental Management, Regulatory Matters and Activity Management Issues

9.0 ENVIRONMENTAL MANAGEMENT ISSUES – INCLUDING RESOURCE CONSENTS, DISCHARGE PERMITS, 'RIGHTS TO TAKE', PROPERTY DESIGNATIONS, ZONINGS and EASEMENTS

9.1 Resource Consent Issues

Resource consents are held for various activities relating to the wastewater activity such as odour to air, discharge to water, discharge to land and sewer siphon.

Gisborne is a unitary authority and performs the functions of both a District and Regional Council. Regional Councils are responsible for granting resource consents. The Gisborne District Council appoints independent commissioners to decide on its own consents in order to avoid any possible conflict of interest.

The Utilities Manager monitors the expiry date of all resource consents to ensure that the necessary steps for renewal are undertaken in a timely manner.

9.2 Schedule of Resource Consents Held

Resource Consents held for Wastewater Activity are shown in Table 22 below.

Table 17
Resource Consents held as at 30 June 2005

Scheme	Site	Consent	Consent Number	Issue Date	Expiry Date
Gisborne City	Marine / Ocean Outfall	Take 380m ³ of water per day from underground	WP199030A	20/12/1999	30/06/2007
		Discharge up to 103,680m ³ Wastewater per day	CP199007, CP199008 & CP199009	14/10/2004	31/12/2005
	Campion Bridge	Sewer siphon	RW201012A	1/12/2001	31/12/2006
Te Karaka Oxidation Pond	Te Karaka	Discharge odour to air	DA201014A	1/03/2002	1/03/2037
		Discharge water	DW201018A	1/03/2002	1/03/2037
		Discharge to land	DL201011A	1/03/2002	1/03/2037

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Scheme	Site	Consent	Consent Number	Issue Date	Expiry Date
Septage Disposal Pits	Te Puia	Land use	PN 201032A	04/02/02	Indefinite
		Discharge to air	DA 201017A	12/02/2002	18/02/2037
		Discharge to land	DL 201014A	18/02/2002	18/02/2037
Septage Disposal Pits	Te Araroa	Land use	PN 199015	4/12/2001	Indefinite
		Discharge to air	DA 201009A	4/12/2001	4/12/2036
		Discharge to land	DL 201023A	4/12/2001	4/12/2036
Septage Disposal Pits	Waiapu	Discharge to land	DL 199012	23/06/2000	23/06/2010

New consents are currently being sought for upgraded wastewater treatment processes.

9.3 Property Designations

The Gisborne District Council District Plan, Appendix 10 contains a schedule of designated sites. Not all wastewater network activity sites are designated in the District Plan, and further research and investigation is required to determine whether additional site designation is required. Future expansion of site designations in the District Plan has yet to be addressed, and is not currently a priority. Major new asset sites are considered for designation as they are acquired. The new Wastewater Treatment site adjacent to the airport is being considered for designation.

The wastewater network sites currently designated in the District Plan include:

- Te Karaka Oxidation Pond
- Gisborne Marine / Ocean Outfall

10.0 DEMAND MANAGEMENT

10.1 Demand Management Policies

Demand Management involves implementing non-asset related solutions to manage the demand for a service. Non asset solutions used by Gisborne District Council are summarised below:

- Use of District and Regional Plans
- Stormwater Separation
- Trade Waste Bylaw and liaison
- Reduced Levels of Service / Public Education
- Water Usage Reduction Strategies
- User pay charges where practical

10.2 Sustainable Development Issues

Sustainable development takes into consideration the impact on the environment of human activity as we alter the environment we live in to suit our wants and needs.



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The Community Outcomes and Three Waters Assessments have not identified any specific issues that are not being addressed as they relate to wastewater.

Gisborne Urban Coastal Strategy will provide further detail to plan for sustainable development integrating the community outcomes framework to that consultation.

10.3 Local Government Act Requirements

All requirements of the Local Government Act are believed to be met. Community Outcomes, Sanitary Assessment, Waste Plan, Prudent Financial Management, Reporting Requirements and Schedule 10 requirements.

11.0 SIGNIFICANT NEGATIVE EFFECTS

Significant negative effects as a result of the Wastewater Activity can be measured as impacting on the following aspects of life:

- Social
- Economic
- Environmental
- Cultural

The greatest significant negative effect associated with the Gisborne City wastewater is the high levels of stormwater entering the wastewater reticulation. When high levels of stormwater enter the wastewater system there can be a resulting overload of the sewerage system. This requires wastewater to be directly discharged into the river in order to deal with the overload.

The stormwater upgrade project has been a major commitment of Council, and is now expected to be substantially complete in 2010. A further negative effect is the discharge of effluent into Poverty Bay. The community have indicated that the discharge of effluent into Poverty Bay is not of an acceptable standard and have committed as a priority issue a treatment upgrade before discharging back into Poverty Bay.

12.0 PRIVATE WASTEWATER SYSTEMS

Council has identified, as part of the Three Waters Assessments Consultation, that there are accepted health risks associated with the provision of Water, Wastewater and Stormwater and that the rural communities do not wish the Council to increase Levels of Service to reduce these risks. Due to the costs associated with the development works owned and managed by Council the community does not favour implementation of council capital works that would reduce the health risk.

These towns are currently serviced by privately owned and maintained septic tank systems.

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13.0 SIGNIFICANT FORECASTING ASSUMPTIONS, UNCERTAINTIES and RISK MANAGEMENT

13.1 Assumptions and Uncertainties

Below are the significant assumptions made in preparing this Activity Management Plan:

- I. The information provided has been developed from a sound base, the asset register being of high quality and renewal projections based purely on age, rather than condition or performance.

Some condition based assessments have been completed and only the Marine Outfall economic life has been adjusted. Extensive CCTV condition assessment has been completed and the results have not yet been included. This will be completed in the next review in 3 years.
- II. The accuracy of the valuations, and the need to reassess valuations once the capital upgrading programme is completed, could affect the financial projections.
- III. The renewal programme is based on a reasonable condition sample. These inspections have indicated that the assets are in good condition.
- IV. All financial forecasts allow for inflation using the BERL indices.
- V. The financial information presented in this Activity Management Plan would also be affected by the results of the Gisborne Urban Coastal Strategy, tendering of Capital work.
- VI. That at a future stage the current reticulation system will be extended to include additional industrial and residential areas (such as Wainui).

13.2 Risk Management

Council has considered potential risks relating to:

- System Operation
- Health and Safety
- Public Health
- Business Continuity and natural disasters
- Asset reliability
- Asset knowledge
- System knowledge
- Financial

To assist in focussing the risk management strategies, Council has examined the risks within a criticality framework, which has included developing a critical asset strategy.

Councils risk management strategy has included:

- Operational Risk Review – 2003.
- Development of corporate risk assessments and risk management reports for each major asset system (activity) – 1999, 2000.



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- Development of Lifelines Strategy and Mutual Aid Agreements – 2004.
- Development of a risk model for asset condition / performance and replacement intervention.

Councils risk management practice continues to develop and future corporate integration of risk management is planned. The assessments to date have not been integrated into the renewal programme until such time as the Civil Defence Emergency Management Act requirements have been evaluated which provides further integration with other utility services. This is expected to be completed by July 2007.

13.3 Quality Assurance

To establish and ensure the ongoing improvement of the quality of this Plan a series of quality assurance systems are planned as follows:

- Audits
 - Financial Audits
 - System Audits
 - Technical Audits
 - Performance Audits
- Use of suitably qualified persons
- Introduction of quality systems in critical areas
- Retention of Corporate knowledge through Asset Management Systems and GIS

14.0 WASTEWATER BYLAW

Bylaws currently in force in Gisborne District Council, and continued by Section 293 of the Local Government Act are the:

- Trade Waste Bylaw

Council is also intending to adopt the New Zealand Standard Drainage Bylaw NZS 9201: Part 22:1999. Council intends to review the current Bylaws by 24th December 2007 in accordance with Section 158 of the Local Government Act 2002.

The Councils Wastewater Upgrade Consent will impact critically on the bylaws.