



GOSFORD CITY COUNCIL

SUBMISSION TO

**INDEPENDENT PRICING AND
REGULATORY TRIBUNAL**

PRICING PROPOSAL FROM 2005/2006

SEPTEMBER 2004

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1. INTRODUCTION

In May 2003, The Independent Pricing and Regulatory Tribunal (IPART) handed down a two-year pricing determination for Gosford City Council for the period 1 July 2003 to 30 June 2005.

This submission covers the period from July 2005.

The Central Coast catchment areas are in the grip of the most severe drought on record and works are being programmed for construction to provide additional supplies. This submission allows for the provision of a 20 ML per day desalination plant and other contingency works. Pre construction works are proceeding for the desalination plant and only a highly unlikely extreme and prolonged wet weather period over the next two years would remove the urgency from this project. Significant expenditure associated with this contingency planning and a number of drought management initiatives is currently being incurred and will be increased over the period of the determination.

Council's current pricing proposal retains pricing equality by maintaining a pay for use pricing structure and increasing the proportion of water revenue attributable to usage rather than availability charges. While it is generally considered that the price for water is rather inelastic, Council considers a pricing structure that includes a higher proportion of usage charges, sends the appropriate demand management signals to the community.

The submission addresses the matters raised by the Tribunal, the impacts of the current determination and the Council's corporate objectives. These objectives are the result of an extensive consultative process, undertaken in accordance with the Local Government Act.

The submission complies with the Council of Australian Governments COAG reforms for the water industry.

2. COUNCIL'S OBJECTIVES

2.1. City Management Plan

The Council's prime objectives as contained within the City Management Plan are:

- *To meet the community's needs by providing a high quality water supply complying with recognised drinking water standards through the planning and development of water supply schemes and the operation and maintenance of existing installations.*
- *To transport and treat sewage for disposal by effectively planning and developing works and operating and maintaining existing installations to provide services fit for customers' purpose in an environmentally sustainable manner.*

Development of the City Management Plan involves a comprehensive program of public consultation to develop all aspects of the future directions from the corporate values to the levels of service and associated programs and budgets that reflect the community wishes while balancing resources and expectations.

As part of this process, Council regularly commissions independent surveys to assess community expectations and review customer satisfaction with Council services. In March 2004 Gosford City Council commissioned The Central Coast Research Foundation (CCRF) to conduct a community survey on the Central Coast to assess community opinions regarding the environment and water services. Micromex Research on behalf of both Gosford City Council and Wyong Shire Council completed telephone surveys in December 2003 and April 2004 to assess the level of awareness of water restrictions in place at that time and attitudes towards water restrictions. These surveys were conducted to gain a greater insight into customer expectations and perceptions.

These perceptions and expectations are translated into levels of service objectives and plans together with the necessary funding, balancing resources and expectations.

To assist in achieving Council's objectives Council has developed a best practice Strategic Business Plan for its water and sewerage business. The Plan has been prepared in accordance with the requirements of the Department of Energy, Utilities and Sustainability (DEUS) *Best Practice Guidelines for the Management of Water Supply and Sewerage*.

2.2. Strategic Business Planning

Guidelines for Best Practice Water Supply and Sewerage Management, as published by DEUS, provide for the development of a Best Practice Strategic Business Plan that addresses key issues, including:

- Pricing and Developer Charges
- Demand Management
- Drought Management
- Performance Reporting
- Integrated Water Cycle Management
- Customer Services
- Asset Management

IPART through its determination and consultants reports has also encouraged the preparation of such plans.

The “*Guidelines for Best Practice Water Supply and Sewerage Management*” provide a triple bottom line focus ensuring a balanced view of the long-term sustainability of NSW water utilities. Triple bottom line accounting (social, environmental and economic) involves consideration of the business plan together with its social and environmental management practices. The Guidelines also advise that the community and governments are demanding increased accountability, increased levels of service and efficiency from water utilities. In addition, regulatory authorities are imposing more stringent environmental and health regulations. A Strategic Business Plan addresses these issues and provides a framework within which the Local Water Utility (LWU) can provide these services in an efficient manner and can continue to improve its performance. The plan must provide for “Active intervention” with regard to Demand Management – appropriate retrofit programs, rebates for water efficient appliances, rebates for rainwater tanks, effluent and stormwater reuse programs and building code programs, all of which require significant financial input. The implementation of improved asset management systems alone will incur substantial costs.

Council has progressed significantly in developing these plans at a cost, to date, of approximately \$180,000. The estimated total cost of developing final documents is \$400,000 excluding WaterPlan 2050 and documents associated with Integrated Water Cycle Management.

3. ISSUES IMPACTING FINANCIAL PERFORMANCE

3.1. Current Environment

The major influence impacting the current operating environment is a water supply drought that is the worst in recorded history. The drought has had impacts in the following areas:

- Planning for future long term water security - WaterPlan 2050
- Drought contingency planning
- Drought management including water demand management
- Water sales as a result of water restrictions and developing community awareness of water conservation.

3.2. Revenue

Total water and sewerage charges for the average residential consumer have reduced in real terms over the past decade. For example over the past seven years the average residential customer's total charge has reduced in real terms by 30%. This represents a reduction of more than \$300 on the total charges that would have been incurred had charges increased by inflation over this period. This has been achieved by a combination of efficiency gains resulting from Council's workplace reform process, albeit not at the rates suggested possible by IPART and savings in asset replacement and renewal programs as well as loan retirement. However, it is Council's view that continued reductions in charges cannot be sustained.

Council is faced with increasing costs arising from a combination of factors. The most significant of these are:

- Development of contingency measures associated with the current drought.
- Planning for the long-term water supply security.
- Addressing the implications of water sharing plans on water harvesting.
- Providing staff resources and information systems to meet regulatory reporting requirements.
- Responding to the State Government proposal to merge Gosford and Wyong Councils' water functions.
- Developing a Water Strategic Business Plan to meet DEUS regulatory requirements.
- Implementing improvement programs particularly in asset management focusing on asset replacement and renewal associated with ageing assets.

These cost factors along with the significant reduction in water consumption anticipated in Council's previous submission but which was not reflected in the pricing path approved by IPART have impacted on Council's financial position

The Council proposes that the existing pricing structure remain, except for mandated changes (DEUS) in Trade Waste charging. A proposal to move to an inclining block tariff both of which have been identified in the *Guidelines for Best Practice Water Supply and Sewerage Management* as published by DEUS and by IPART will be examined in further detail over the period of the determination. The requirements for additional revenue for water supply activities and sewerage are proposed to be met by an increase in the usage component.

The IPART determination for the period 2003/04 - 2004/05 has had a significant impact on the Council's financial position. The decisions not to include the drainage transfer payments forecast to be \$3M per annum, and the reduction in revenue from the decision to base water sales revenue on higher than realised and predicted consumption in the price setting are addressed later in the submission.

This submission provides for the payment of Tax Equivalents and a Dividend to the Council's "General Fund" which is now required and permitted respectively by changes to the Water Management Act. The DEUS has an expanded role in the regulation of Council's activities, which is reflected in increased revenue requirements and changes to pricing structures.

3.2.1. Current Drought

The drought has impacted water supplies since 1992, from which time water storages have fallen from 70% to their current level of about 24%. (More detail on the current situation is detailed in the attached Briefing to Premier's Department (Appendix A).

By February 2002 the storages had fallen to 41%. This represented about 8 years of usable storage based on the rate at which the storages had drawn down over the previous 10 years. While system modelling, based on historical rainfall and revised stream flow data, indicated that with a return to normal rainfall patterns, the storages would recover, the Board of the Gosford and Wyong Councils' Water Authority considered it prudent to review the long term water supply strategy for the Central Coast which was then over 20 years old. Other factors such as Water Management Plans to provide environmental flows and climate change had also emerged. This involved the letting of a major consultancy to the Department of Commerce to review various options including:

- Reducing usage through demand management
- Effluent re-use to substitute for potable water use
- Further extractions from run of river flows
- Use of groundwater
- Desalination

The reports resulting from this consultancy are currently on public exhibition and form the basis of "WaterPlan 2050".

Decisions in relation to longer term works associated with WaterPlan 2050 will be made by mid 2005 and will include significant future capital expenditure to ensure the long term security of water supply for the Central Coast.

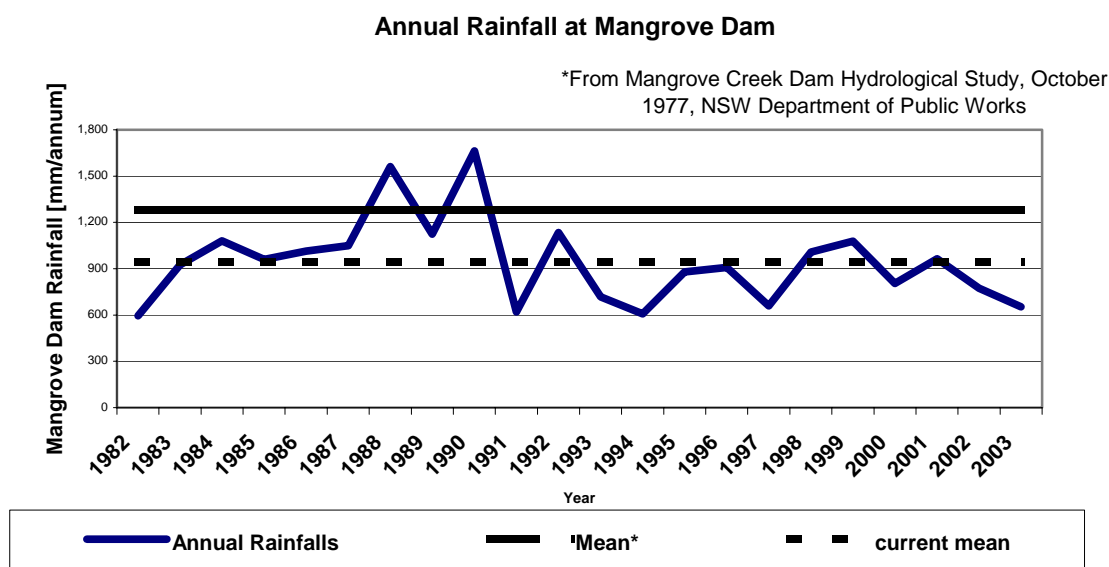
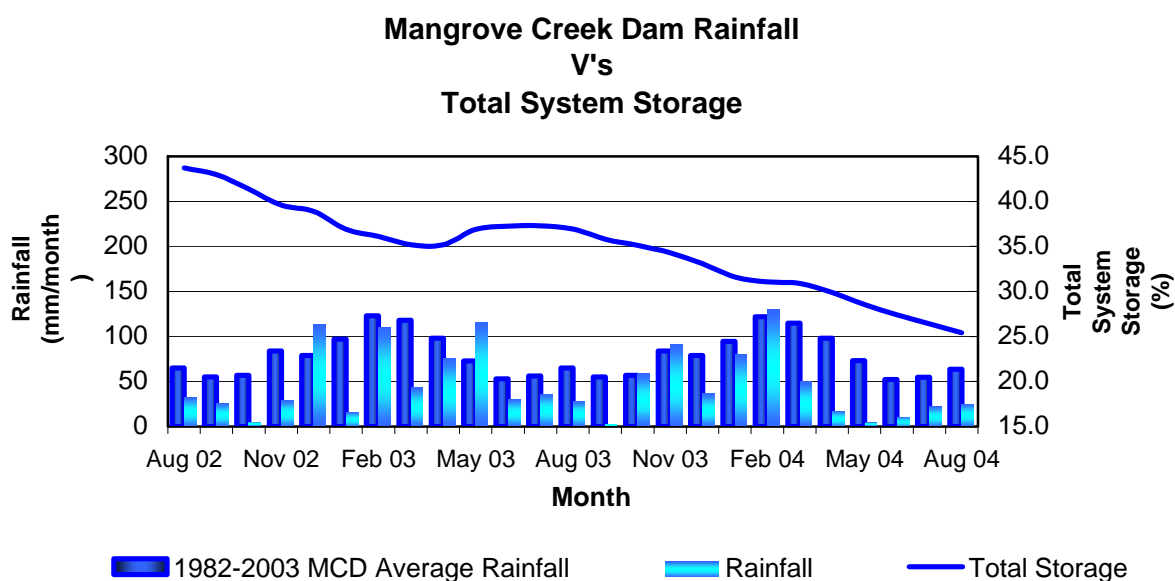
Major works required in the short term to improve system security and speed recovery from the drought include:

- Augmentation of the Lower Wyong River Pumping System
- Construction of the Mardi High Lift Pump Station
- Augmentation of the Mooney Mooney Transfer System
- Raising of Mardi Dam

The current drought is the major contribution to many factors associated with this pricing submission. Increased capital and operating expenses reflect works currently under construction and being planned to provide a sustainable water supply to the Central Coast. Revenue from water sales is significantly impacted by the current circumstances.

A separate paper appended to this submission details the potential impact of various water consumption scenarios on business revenue.

The following graphs show the continual fall in storage levels and the level and impact of rainfall patterns over the last two years.



Note: "Mean" is the long term 100 year historical rainfall.
 "Current Mean" is the average rainfall over the last 10 years.

This graphs show that recent rainfalls are not only significantly less than average but also that recent isolated periods of above average rainfall have little or no impact on available water supply.

From a hydrological perspective, average inflow could only result from higher probability rainfall events as the catchments are extremely dry. As a result of many years of below average rainfall a return to average rainfall will not produce average inflow in the short term.

Over the past two years the Board of the Gosford and Wyong Councils' Water Authority has undertaken a number of measures to deal with the drought and to

provide for a sustainable water supply into the future. As part of its drought management plan the Board implemented Level 1 Water Restrictions in February 2002 and Level 2 / 2A Water Restrictions on 17 May 2004 and 1 August 2004 respectively.

Together with the water restrictions, the Councils have implemented a range of contingency measures targeted at managing the Central Coasts water reserves through the drought. These included:

- A number of community education initiatives to encourage water conservation
- Retrofit of Council facilities with water efficient appliance and devices
- A programme to refit residential homes with water efficient devices
- A water audit program for major water users of the system
- A programme to retrofit rainwater tanks to existing residential properties
- Amendments to operational procedures to reduce water losses during mains and reservoir cleaning
- A system leakage reduction programme
- Investigations of effluent re-use opportunities
- Investigation and development of bore water sites for both non-potable and potable uses
- Purchase of water from the Hunter Water Corporation
- Pre-construction activities associated with construction of a desalination plant
- Pre-construction activities associated with accessing water in Mangrove Creek Dam when the level drops below 21%
- Operational contingency planning associated with accessing low level supplies in Mangrove Creek Dam, Mardi Dam and Lower Mooney Dam.

Table 1. Summary of Restriction Program.

Total Storage	Restriction Level	Review	Date Introduced	Target Reduction
>40%	No restriction			
≤ 40%	Level 1	≥ 47%	February 2002	8%
≤ 30%	Level 2	≥ 40%	August 2004	16%
≤ 22%	Level 3	≥ 30%		24%
≤ 17%	Level 4	≥ 22%		32%
≤ 12%	Level 5	≥ 17%		38%

The above trigger levels are adjusted depending on the time of year.

Included in the analysis is the planning for a 600ML/month desalination source from 1/1/2007 and 110ML/month from other sources from 1/1/2005 operating if Mangrove Creek Dam <24% full.

Even if median inflows were to be experienced it would be more than two years before water restrictions could be removed. Consequently, revenue will remain low due to restrictions. If sufficient rains are experienced to enable restrictions to be lifted there will be lower than normal external use in the home due to the wet weather. Only after storage has recovered and a “normal” or dryer than “normal” year is experienced will revenue return to average. As restrictions are likely to be in place for two years and if a quick recovery is experienced, the current determination should recognise the available revenue will be below average and at a similar level for the

past two years since the introduction of water restrictions even with the proposed increases in changes identified in this submission.

Recent seasonal outlook projections by the Bureau of Meteorology and Queensland Centre for Climate Applications indicate a 50% chance of below average rainfall over September to November 2004. The seasonal projections also predict a 55% chance that the medium minimum and maximum temperatures for August 2004 to October 2004 will be higher than average. The El Nino wrap-up of 7th September 2004 suggests that the risk of seeing the beginnings of an El Nino event, which is characterised by lower than average rainfall, has increased.

While the limitations of forecasting must be recognised, there is nothing to suggest that above average rainfall is likely in the near future.

3.2.2. Drought Contingencies

While the Council has introduced restrictions on the use of water it has also actively pursued demand management options and alternate sources of supply to preserve and supplement potable water supplies.

The capital works program includes investing in reducing system leakage, the establishment of potable and non-potable groundwater sources, and the use of reclaimed effluent from Sewage Treatment Plants and sewer mining. Other contingency expenditure includes provision of a system to transfer water from Mangrove Creek Dam to Wyong River via Bunning Creek in the event that the Mangrove Creek Dam storage level drops below the lower tunnel inlet level, increasing the capacity of supply from the Hunter Water Corporation, and the substitution of potable water at Vales Point Power Station.

The provision of a desalination plant to provide additional supply is progressing through the pre-construction phase to enable a plant to be commissioned at the earliest possible date. It seems that due to the dire storage levels the Central Coast has no option but to proceed with the desalination plant. Capital and operating expenditures associated with this project have been included in the submission

Other expenditures are also included in operating expenditure budgets.

3.2.3. Gosford Wyong Councils Water Authority

The Gosford Wyong Councils Water Authority Board has completed a number of reviews that will determine future expenditure requirements. The following studies were undertaken to inform the Board of options available to service the Central Coast:

- Review of Adopted Scheme and Surface water Systems
- Water Reuse Initiative
- Potential for Desalination
- Use of Groundwater
- Water Saving Initiatives
- Overall Options Report
- Mardi Dam High Lift Pump Station
- Forest Hydrology

- Hunter Connection
- Drought Management
- Two Tier Environmental Flows
- Water Saving Rebates.

The current submission includes funding for a number of initiatives identified in the reviews including:

- Construction of Mardi Dam High Lift pump station
- Mardi Dam transfer system
- Lower Wyong/Mardi Dam transfer system
- Mardi Dam raising
- Provision of a powdered activated carbon treatment facility
- Provision of manganese removal treatment facility
- Installation of groundwater extraction facilities
- Undertaking of water audits
- Undertaking leakage investigations and rehabilitation
- Retrofit program of water saving devices in households
- Provision of a desalination plant
- Use of reclaimed water from Sewage Treatment plant
- Provision of sewer mining plant

3.2.4. Reduction of Debt

In previous submissions, Council has expressed its commitment to reduce indebtedness and not to rely on new debt to fund new or replacement capital works.

Council's objective with respect to debt remains;

- To minimise the reliance on new debt to fund new or replace capital works.
- To follow a strategy of debt retirement which minimises the cost of servicing this debt
- To make no significant funds available from revenue to fund future renewals whilst significant levels of debt exist.

At the present stage Council is following a strategy of reducing its indebtedness at a rate that on an overall basis minimises the cost of provision of infrastructure to the community. However, as a result of significant reductions in revenue resulting from the current determination, this policy objective will of necessity be reviewed.

This does not eliminate Council's wish to maintain a strategy of debt management that equitably minimises the cost of providing services.

3.2.5. Drainage Management

The Tribunal's decision in the 2002 determination did not provide for the transfer payments and the management of drainage as part of the Business has subsequently been the matter of discussion between the Council and the Tribunal. As indicated to the Tribunal in February 2004 Council proposes to bring the Drainage financial management and accounting functions into the Water and Sewerage business and report on drainage in the same way as it currently reports on Water and Sewerage. In July 2004 Council advised the Tribunal that it proposes to move the assets to the Water and Sewerage Directorate but requests that sufficient time be provided to undertake this functional arrangement over the period of the next determination. The Tribunal accepted this proposal in a letter dated 25 August 2004. In the meantime Council is proposing to continue to fund stormwater/drainage through the Water and Sewerage Programs.

3.3. COAG Reforms

Council's two part pricing structure based on consumption meets COAG requirements and National Competition Policy guidelines.

This pricing submission includes a calculation which satisfies COAG reforms:

- A return on investment in the infrastructure
- Full cost recovery and competitive neutrality.

National Competition Policy requires Council to obtain a rate of return inclusive of tax equivalents and dividend calculations. Recent legislative changes now require and permit such payments and these have been included in the revenue requirements.

4. ISSUES RAISED BY IPART

The issues paper released by IPART sought detailed information on the business performance and comment on a number of specific issues. The following comment is provided for the Tribunal's consideration.

4.1. Revenue Requirements

The Council provides through the Annual Information and Special Information Returns (AIR/SIR) details of its past and projected performance. The Tribunal has indicated that it will be asking the agencies to inform them of the drivers behind any real projected increases and it is presumed that this will be through the information returns and IPART's consultant's review of expenditures.

Specific increases are addressed in the following sections of this submission under revenue requirements and expenditure.

4.2. Price Structure

Council does not propose to seek changes to the structure of prices for Sewerage

services but does propose the introduction of a revised Trade Waste charging structure.

The Tribunal's Investigation into *Price Structures to Reduce the Demand for Water in the Sydney Basin* has been reviewed. There is no fundamental disagreement that in relation to retail prices for residential consumption, a suitable price structure is an "inclining block" structure, which includes a two-tiered variable usage charge. This proposal is supported by DEUS *Best Practice Management Guidelines for Water Supply and Sewerage* which sets a two tiered structure with a doubling of water usage charge for residential consumers with water usage exceeding 400KL/year. However such a charge should only relate to domestic consumption as it is designed to be a demand management tool. To apply to non-domestic use would impose a significant unsubstantiated increase on commercial operating costs. This will likely also be required to consider the increased operating and capital revenue requirements resulting from implementation of contingency plans.

Council proposes to investigate the impact that a charge of twice the base charge/KL for all water consumption over 400 KL per year has on large volume residential customers. At this stage Council is not seeking the adoption of a step price increase in usage charges as part of this determination.

In regard to domestic use the Joint Water Authority Board resolved (September 2004) to require all users exceeding 3.5KL/ day consumption or having a trade waste licence to prepare water management plans aimed at reducing water consumption.

4.3. Consumption Forecasting and Usage Revenue

The IPART determination (May 2002) to not base a revenue requirement on a reduced level of consumption as a result of the implementation of restrictions in February (2002) has impacted on Council's financial position. The problem has been exacerbated by the revised consumption data being significantly lower than that reported in the 2002 AIR return. The issue is the subject of an independent submission to IPART, a copy of which is attached as Appendix B.

The following metered consumptions have been adopted for revenue forecasting:

Year ending June 2006	11,825 ML
Year ending June 2007	11,955 ML
Year ending June 2008	12,722 ML
Year ending June 2009	13,506 ML

4.4. Fire Service Charges

There are many developments in the city where the demand for fire services is potentially higher than the demand for "normal" type usage. This is particularly the case in industrial and commercial areas where examples of such cases would include:

- Storage warehouse
- Office block
- Retail outlets

Where only a small domestic supply is required but the requirement for fire fighting is large.

In areas zoned for such activities, mains need to be installed to supply the fire demand and generally a minimum main size of one hundred and fifty millimetres has been provided. There is a cost associated with managing these assets including the provision, maintenance, regular replacement and reading of a separate meter. There may also be little consumption associated with the property and consequently little opportunity to recover these costs. Without a fire service charge the costs cannot be recovered without subsidisation by the broader community.

In recognition of the need for charges to be equitable and to reflect the use of the system all users of the system are charged a fixed charge meter fee. In 2004/05 the cost of provision, maintenance, replacement and reading of meters is approximately \$2m.

4.5. Exempt Properties

It is understood that the legislative changes to enable exempt properties to be charged an equivalent amount for the provision of a service is being addressed. Council is basing its charges on receiving income from these properties. If at the time of determination the matter has not been resolved then an increase in the charges to raise the revenue shortfall will be required.

5. REVENUE REQUIREMENTS

5.1. Operating Expenditures

5.1.1. General

Council has progressed significantly in developing a *Water and Sewerage Strategic Business Plan* at a cost, to date, of approximately \$180,000. The estimated total cost of developing final documents is \$400,000 (\$110,000/year). In addition in conjunction with Wyong Shire Council, Gosford City Council is developing a Strategic Master Plan to provide sustainable water supply through to the year 2050. Gosford City Council's costs for WaterPlan 2050 documents and processes and implementing Integrated Water Cycle Management over the next four years is expected to cost \$400,000 per year.

In July 2004 the Council was requested by the State Government to review the management of its water supply and sewerage services with a view to an amalgamation between the Gosford and Wyong water businesses. Consultants have been engaged to examine the options. The cost of this review has totalled approximately \$200,000 to date.

5.1.2. Water

Council is experiencing increased operating expenses as a direct result of the current drought, legislative requirements, the provision of improved service levels and governance issues associated with the structure review. Additional costs have been incurred as a result of the need to engage consultants to examine water cycle

management, asset management and business planning. These matters are the subject of the Department of Energy Utilities and Sustainability requirements.

As a result of the drought, various programs have been introduced to manage demand. A residential retrofit of water efficient appliances has been introduced (\$300,000 in 04/05), non-residential water usage audits initiated (\$100,000 in 04/05) and a rainwater tank rebate program introduced (\$200,000 in 04/05). The impact of these programs has been an increase in costs and a reduction in revenue.

To boost available supplies, water is being purchased from Hunter Water Corporation. In 2005/06 there will be an annual cost to Gosford City Council in the order of \$1,000,000 per annum as up to 6ML/day will be provided to the Central Coast.

Simultaneously there will be a reduction in revenue due to decreased water consumption from the implementation of restrictions; currently 16% but this is expected to be 24% when Level 3 Restrictions are implemented later this year.

While production from existing sources is lower due to the restriction and demand management initiatives, this does not reflect proportionately on operating costs, as variable costs are a small proportion of the overall OPEX expenditure.

A significant increase in OPEX of \$2.92m per annum will result when the desalination plant is commissioned. In all, the planning for desalination, groundwater investigation and a Hunter connection will incur approximately \$1.5m per year in costs in the first two years of the determination. (Hunter connection supplying up to 6ML per day, \$2m, and demand management and WaterPlan 2050, \$800,000 over the first two years of the determination). In addition increased operating costs will be incurred as a result of the projects listed in 3.2.

5.1.3. Sewerage

5.1.3.1. Odour & Septicity Control Measures

Additional costs are being incurred from environmental compliance issues. Council is commissioning a septicity control system to reduce odours. The installation and commissioning costs are \$550,000 with annual recurrent costs of \$720,000 being paid to contractors to operate the facilities.

5.1.3.2. Biosolids Reuse

Biosolids reuse has continued to be a major cost to Council over the past few years, with an annual expenditure of around \$737,500, based on 25,000 tonnes at \$29.50 per tonne. Biosolids are fully reused through rehabilitation of mine sites in the Hunter Valley. If disposed to landfill costs would be of the order of \$78 per tonne.

The costs for biosolids reuse is expected to be substantially more than \$29.50 per tonne over the determination period as new contractual arrangements will have to be arranged.

At the time of signing the current contract in 2001 the NSW State average cost for biosolids removal was \$60.00 per tonne, this would equate to around \$1.5M per annum, or an increase of \$887,500 per annum. This is based on a presentation by Michael Lane at the Vivendi Water Australia Biosolids Seminar held 16 May, where Mr Lane commented the "average biosolids was \$55-60 per tonne (in 2002) disposed off site after initial dewatering". Currently some authorities are paying as high as \$100.00 per tonne, as indicated by Sydney Water Corporation at the AWA Biosolids Specialty Conference 19/20 June 2002.

Recent costs that SWC has advised are of the order of \$52 per tonne. Council's contract has been extended from February 2004 to February 2005 at a variation in price from \$24.5 to \$29.5, which reflected changes in the "transport price index" over the previous three years. Future costs will depend upon the demand for biosolids and relevant environmental laws placed on reuse of biosolids. While Council may still have the same disposal opportunity, regulatory requirements and the price other Authorities pay will force prices higher.

Odour complaint investigations have suggested that the full sludge lagoons are a source of odour and that the emptying of the lagoons needs to be accelerated. Council will be calling additional tenders for sludge dewatering and disposal in addition to the present contract committed to above. These costs are estimated at \$170,000 for each lagoon with one in 2004/05 and one in 2005/06.

Alternative methods of biosolid removal are being pursued however no economically suitable substitute has been identified. This pricing submission is made on the assumption that costs will remain at the current or similar level. IPART is requested to note the potential impact of not being able to maintain the same level of contract payments per tonne will have on Council's revenue requirements.

5.1.4. Energy Costs

The Tribunal's current determination allowing the inclusion of green energy costs has allowed Council to maintain its support for the Cities for Climate Protection program. This is an international program focussing on local governments and their actions towards reducing greenhouse gas emissions. Council again seeks continued support to this commitment.

Council would like to reinforce an opinion it has maintained for sometime that operation, electricity, telemetry, maintenance and replacement costs of water and sewerage pump stations is higher per customer in Gosford than in Sydney or the Hunter due to the high number of pumping stations required for its topography. Council would again appreciate IPART taking this into consideration when determining efficiency targets and making comparisons to other authorities.

5.1.5. Contributions to Drainage Works

Contributions from water and sewerage to the general fund for the purpose of funding some drainage works is again included in operating expenses. As previously indicated the issue of drainage management is subject to discussion with the Tribunal. Notwithstanding the final outcome, the previous decision to disallow revenue to cover the drainage costs has impacted on the viability of the water and sewerage funds. An allowance is sought in this determination.

5.2. Capital Expenditures

5.2.1. Asset Management

A designated team has been established to focus on asset management issues.

The longer-term asset replacements for water and sewerage are supported by a detailed review of asset accounting procedures. The asset register has been revised to provide for a larger range of asset classes and more detailed asset valuation and depreciation schedules. The detailed asset replacement program has been developed covering all classes of assets based on actual asset consumption rates. Each class of asset has been assigned in asset degradation curve that best fits the actual asset consumption rate based on the available information. These curves can be adjusted as more information becomes available.

A detailed review of asset performance and condition is undertaken for the short-term replacement program (3 years) and the longer-term program financing requirements planned for the new register.

5.2.2. Water Capital Works

The Council's program for water supply capital works is the output from the review of the scheme undertaken by the Department of Commerce, the works associated with development areas and asset renewals, and the current drought conditions resulting in reduced water resource availability in storages.

A significant driver of work resulting from the scheme review is the impact of the Water Sharing Plans drawn up by the State Government to allocate more water to the environment to protect the health of NSW Rivers. Increases in pump capacities are required to enable pumping from the high flows in streams when available. Works

currently underway or committed include Lower Wyong River transfer system, Mardi high lift pump station, Mooney Dam transfer system, Mardi Dam transfer system, and the Mardi Dam raising.

Only the Water Sharing Plan for Ourimbah Creek has been completed to date but the direction within this plan is likely to be incorporated into other plans.

The following outlines the current status of these projects:

Lower Wyong River Transfer System

The Lower Wyong Transfer System involves the augmentation/replacement of the existing Pumping Station 1 near the lower Wyong weir and the construction of an additional rising main between the pumping station and Mardi Dam. Increasing the capacity of the pumping station is estimated to increase the yield of the Gosford Wyong water supply system by 850 ML/yr. The yield increase from the work, however, may be neutral when a water-sharing plan is introduced for the Wyong River.

An initial investigation report was prepared for the work by the Department of Commerce. This report recommended the retention of the existing pumps and pumping station structure, and the construction of duplicate rising and suction mains. Because of the criticality of the pumping station in the operation of the system and the age of the existing pumps (approximately 30 years old), a detailed condition assessment of the pumps is being undertaken. This work involves disassembly of the pump components and is presently being undertaken.

A brief for the concept design of the upgrade works is being finalised, and will be issued pending the outcome of the condition assessment work. It is anticipated that a business case for the work will be submitted to the February 2005 Joint Water Authority Board meeting.

Mardi High Lift Pumping Station

The proposed Mardi High Lift Pumping Station is to be constructed at Mardi Water Treatment Plant. The pumping station would pump water to the existing Tuggerah No. 2 reservoir, which will allow water from Mardi to be fed into the Gosford system. In addition, feeding the northern end of Wyong Shire from Tuggerah 2 reservoir will improve water pressures in the Warnervale area. The initial investigation work indicated that there will be significant cost savings once the pumping station is constructed, as it will be cheaper to pump water to areas of the Gosford system from Mardi than pumping from Lower Mangrove weir to Somersby Treatment Plant. The pumping station would increase the yield of the combined Gosford Wyong system by around 1100 ML/yr.

Concept design for the high lift pumping station is being undertaken by the Department of Commerce. The concept design work was let in two phases:

Phase 1: system hydraulic modelling and development of pump duties and configuration

Phase 2: concept design and preparation of a detailed cost estimate.

A draft report for the Phase 1 work has been submitted and reviewed. The Phase 1 work took longer than initially programmed because of issues associated with the development of a combined Gosford-Wyong water supply network model. The

individual Council models were incompatible in their existing forms and further development work was required to update and skeletonise both Councils' models for use in the high lift project. In addition, Wyong Council had to review and document the proposed operating strategy with respect to setting reservoir and pressure zones under the new high lift configuration to enable modelling to be finalised.

Work is now progressing on the concept design of the high lift pumping station, with the draft concept design report due to be submitted in mid August. It is likely that an additional clear water tank will be required at Mardi Water Treatment Plant to enable both the treatment plant and the pumping station to be operated efficiently. The concept design report will contain sufficient cost information to enable the business case for the project to be prepared. This business case is planned to be submitted to the November 2004 Board meeting.

Mooney Dam Transfer System

The Mooney Dam Transfer System project involves increasing the capacity of the existing pumping station at Mooney Dam. The initial concept also involved feeding water from lower Mangrove weir into the dam via the Somersby balance tanks, however subsequent investigation work has shown this work to be uneconomic.

An extensive program of pump testing was required to produce sufficient information for the project to proceed. A draft investigation report for the work has been prepared by the Department of Commerce, and this report is in the process of being finalised. The report indicates that upgrading of the pumping station is feasible, but will require additional suction main capacity – this would be provided by a siphon over the top of the dam.

Following finalisation of yield issues associated with the draft investigation report, a decision will need to be taken on the timing and priority of proceeding with concept design work.

Mardi Dam Transfer System

The Mardi Dam Transfer System project involves the construction of a new outlet tower in Mardi Dam, together with a pipeline and pumping station to convey water to Mardi Water Treatment Plant. The existing tower needs to be decommissioned due to structural issues. The new transfer system will have an initial capacity of 160 ML/d (to match the existing capacity at Mardi water treatment plant), compared with the 100 ML/d capacity of the existing outlet.

Concept design work for the new transfer system was completed by GHD earlier this year. Sinclair Knight Merz has been engaged to prepare tender documents for the design and construction work. The original scope of work will be expanded to incorporate a bypass pipeline to allow water to be fed from the Wyong River directly to Mardi Water Treatment Plant, without having to pass through the dam. This will reduce the construction risks associated with the project, as well as providing long term flexibility in Council's operation of the water treatment plant and raw water system.

Tenders for the design and construction work are programmed to be called in the latter part of 2004, pending a decision on the allowance to be made for the raising of Mardi Dam (see below). Assuming an August tender, a contract is likely to be awarded as early as possible in early 2005, with around a 12 month design and construct period.

Mardi Dam Raising

An initial feasibility study was prepared on the potential raising of Mardi Dam by 2 m. The initial work indicated that this would provide a significant increase in system yield (1400 ML/yr) at a low cost. Following on from that study, additional work was carried out on investigating raising of the dam by up to 4 m. A draft report on the increased dam raising has been received, and additional yield/cost analysis is currently underway to enable a decision to be made on the allowance to be made for the raising of the dam. This decision will be required before tender documents for the Mardi Dam Transfer System can be finalised.

Additional Yield

The current drought has resulted in additional work to provide additional alternate sources and treatment of available resources. These include a desalination plant, Mangrove Creek Dam to Bunning Creek pump station, sewer-mining plant, groundwater extraction facilities and system leakage and rehabilitation works. Additional yield is also required to provide supplies for the expanding population on the Central Coast.

The following outlines the current status of some of these activities:

Desalination Plant

A major desalination plant is being planned and pre-construction activities are underway with potentially construction to commence late 2005. This project is vital to ensure the medium term minimum supply of water to the Central Coast community. It will supply 20 ML per day to the Central Coast supplementing supply to help ensure that storage levels in Mangrove Creek Dam and other water storages do not drop below levels needed to supply minimum water requirements to our customers.

The submission for prices includes planning and pre-construction costs and scheduled construction of the desalination plant. Only an extreme wet period over the next nine months could provide sufficient water resources for consideration of the desalination project not proceeding. Current forecasts do not suggest the likelihood of consistent heavy rain over the catchment in the short-term. The community consultation phase of the project is under way.

Additional Works / Contingency Plans

A range of contingency plans are under development covering desalination, use of recycled water, use of underground water, demand management options including rebate programs and the development of a connection with Hunter Water. Other contingencies being addressed include the provision of pumping facility to provide for transfers to Bunning Creek tunnel once the level drops below the inlet should the need arise. Another covers the operations needed to extract Mangrove Creek Dam storage below the selective withdrawal facilities available within the outlet tower. This procedure requires the use of the "Low Level Intake".

A major medium term project that is planned to commence in 2012/13 is the Lower Wyong to Mangrove Creek Dam via Bunning Creek tunnel. This is a \$50 million project to supplement yield as demands increase. In times of high flow in Wyong River surplus volumes will be pumped to Mangrove Creek Dam for storage and subsequent release as required to satisfy demands.

A Water Meter Replacement Program has prioritised the replacement of all meters found to be unreliable or beyond their serviceable life within the system. The program has been developed to cover all meters at risk of being outside accuracy tolerances. This will assist in managing water usage and system losses and improve the revenue raised from water sales.

5.2.3. Sewer Capital Works

5.2.3.1. Hawkesbury Villages Sewerage Scheme

The Hawkesbury Villages Sewerage Scheme will provide a sewerage service to the currently unserved properties on the Hawkesbury River.

Preliminary designs have been completed, with Sydney Water now in a position to proceed. State Government funding has been reduced and Council is seeking to reinstate the original subsidy offers. However it is anticipated that the project will proceed to the approvals stage by late 2005/early 2006 and commissioning by late 2007/early 2008.

In addition to the reduced funding, Council is now required to accept increased risks and costs and provide more resources under the new criteria set by the State Government. Council will have to initially fund all pre-construction activities and apply for subsidy before construction commences. Also, Council will be required to provide additional project management services and will not receive subsidy for any variations or cost overruns.

A separate letter requesting IPART's consideration of the spreading of the cost of this project across the broader customer base will be forwarded in the near future.

Costs to property owners will increase, as residents are required to pay for any unsubsidised costs. For Mooney Mooney and Cheero Point these costs are estimated as follows:

- Cost per property under original funding arrangement: \$8,000 to \$10,000
- Cost per property under reduced funding arrangement: \$11,000 to \$13,000

5.2.3.2. Terrigal Major Catchments Augmentation

This project involved the augmentation of components of the sewerage system within the catchment of the Terrigal Major Pump Station (PS TM) including this major pump station along with eight (8) other minor pump stations and three (3) rising mains.

It was a complex, multi-disciplinary project involving the civil, mechanical and electrical upgrade of existing infrastructure. The work also presents major environmental risks associated with excavation in acid sulphate soils, construction near wetland areas and cutting into live sewer systems.

The Terrigal Project had been significantly delayed due to the following reasons:

1. The original design of the project was carried out by an interstate consultant who performed poorly in regard to time and quality of work. The time taken by this consultant to complete the design documentation was more than double what was expected.
2. Further investigation work and design amendment was required in order to reduce Council's risk exposure. This included geo-technical investigations and alterations to improve constructability and disruption to the operation of the existing sewer system.
3. Preparation of detailed environmental reports were required for each site as well as the lodgement of development applications.
4. Some standards and regulations have changed since the original design was commenced, resulting in further amendments particularly in regard to electrical requirements.

This \$7 million augmentation project was completed in 2004 and will ensure that pump stations and reticulation in the environmentally sensitive Terrigal to Wamberal areas are sufficient for the next 20 years. The difficult project involved significant cut-ins and other work in high flow existing sewers and was completed without any incidents and without major cost overruns. Additional operating costs have resulted from this project.

5.2.3.3. Kincumber to North Avoca Catchments Augmentation

Major upgrade works have been planned for the Kincumber to North Avoca sewerage catchments. A number of elements of the sewerage system have been identified as requiring augmentation including gravity carrier mains, major pump stations and rising mains.

However, further investigation work is required to determine the optimum strategy to carry out the upgrade work. This investigation work will need to consider a number of factors including:

- Minimising disturbance to the residents of the area and to the existing sewer system;
- The proximity of environmentally sensitive areas including designated wetlands;
- Integration and staging of works in respect to adjacent sewer systems.

The additional investigation work has been delayed because available resources have been committed to the Terrigal Project (refer to above).

Consultants have carried out an options study. Further evaluation using a multi-criteria analysis is being planned for a triple bottom line decision on the final option due to the sensitive waterways in the area. Following Council acceptance of the consultant's recommendations, it is proposed to fast track the design and construction work, which is anticipated to be completed in 2006.

5.3. Demand Management and Pricing

An investigation of demand management options formed part of the Department of Commerce scheme review.

A number of programs have been initiated to date including an investigation into system leakage, water audits of large consumers, residential retrofit program in conjunction with Energy Australia and Wyong Shire Council and programs to manage unaccounted for water.

It has been recognised for sometime that water consumption is rather inelastic to price. The major driver behind water consumption is weather patterns and external use. Notwithstanding the limitations of price in controlling demand, Council is proposing investigation of a stepped price structure for large volume residential consumers, however is not seeking introduction of such a step price in this determination.

5.4. Residential sewer usage charges

Previous submissions have clearly indicated the difficulty in linking the quantity of sewage discharge to the volume of water consumed through a residential meter and the variation between households use of water that does not find its way to the sewer. However, it is considered appropriate for non-residential customers to be volumetrically charged on a discharge factor based on water consumption. The smaller number of non-residential properties allows for management of the system and for meter testing of the discharge from a particular industry or property to ensure the factor is correct.

The discharge factor adopted is 90% of the meter reading. Where customers believe less water is discharged they may install a meter and be measured on the actual discharge volume

5.5. Trade Waste Charges

The New South Wales Government aims to improve the quality and efficiency of services to residents and strongly recommends the introduction of best practice pricing by water utilities. To assist in achieving its goal, the Government has developed "Water Supply Sewerage and Trade Waste Guidelines".

Council proposes the introduction of the prices for trade waste in accordance with the guidelines and the proposed charges are detailed in Appendix D.

A revised Trade Waste policy is currently on public exhibition. The adoption of prices within this policy is subject to IPART approval of the revised pricing structure.

6. DRAINAGE

6.1. Reason For The Levy

The Drainage Levy was introduced in 1991 following the severe flooding experienced in the late eighties and early nineties. The reason for the implementation of the Drainage Levy was to supplement Council's General Fund and any grant funds. The funds were to be used for Capital works to upgrade the inadequate drainage systems to current design standards to alleviate the flooding to houses and property.

The old drainage systems were designed to low intensity storm events (ie 1 in 10 year events), with little consideration to increased urbanisation or flooding consequences. At the same time there was improve rainfall statistics and analytical methods and standards increased. In the severe storms many systems overflowed showing the need for the upgrading of existing systems.

The Gosford area has experienced a rapid growth in urban development and urban consolidation. This development has placed pressure on existing downstream drainage systems which need to be reviewed and upgraded where necessary.

6.2. Overall Size Of The Problem

Council identified that in 1990 there were some estimated \$50M of outstanding drainage works and \$20M of flood mitigation works to be performed. This broad estimate was based on the reported drainage problems at that time, however this figure is increasing as catchment based detailed studies are undertaken each year to more accurately identify the needs for each area. The latest figure amounts to approximately \$138M as a result of the completion of many area catchment studies, which have more accurately defined the problems. A copy of Council's current list of Outstanding Stormwater Drainage Works is attached.

With the introduction of the Drainage Levy, currently \$2.54M per year, it has only nominally reduced the amount of outstanding work and timeframe to completion to approximately 60 years.

6.3. Work Done To Date

As at June 2004 Council has collected \$32.5M of Drainage Levy funds, which have been used to assist in planning and completing flood mitigation and drainage works. Also, with the assistance of government flood mitigation grants amounting to \$12.6M, many flood mitigation projects have been completed, however this type of funding has been drastically reduced over recent years and there is doubt whether this funding will continue. A graph showing the funding assistance since 1991 from the Drainage Levy and government grants is shown in Figure 1. Also a graph showing Council's expenditure against Drainage Levy income is displayed in Figure 2.

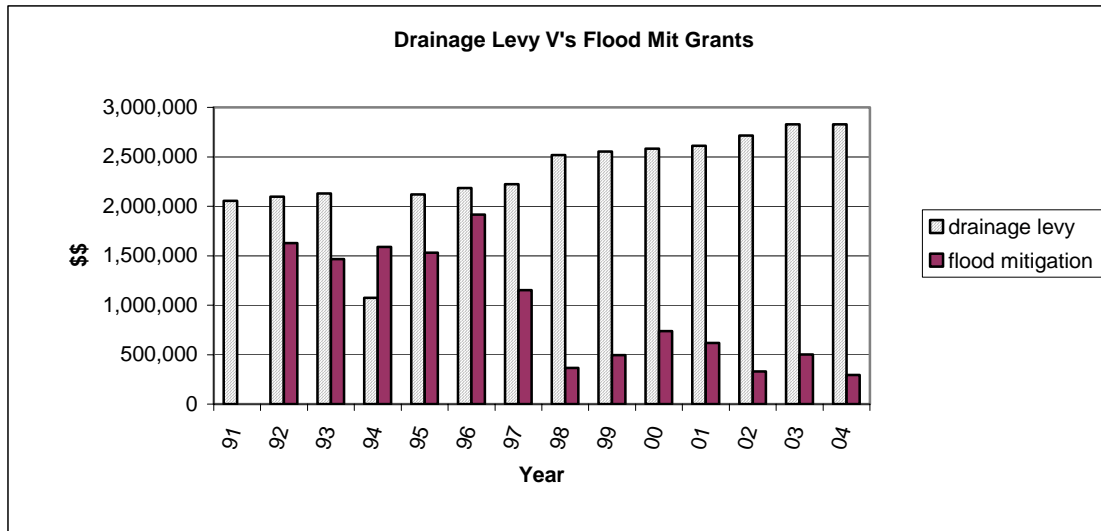


Figure 1 Funding assistance since 1991 from the Drainage Levy and Government Grant

Council has been concentrating its funding to date on alleviating the most severely flood affected houses and town centres. Many of the drainage schemes for particular catchments require extensive upgrades costing millions of dollars. These works are planned for construction in stages in order to provide funds each year to the high priority areas.

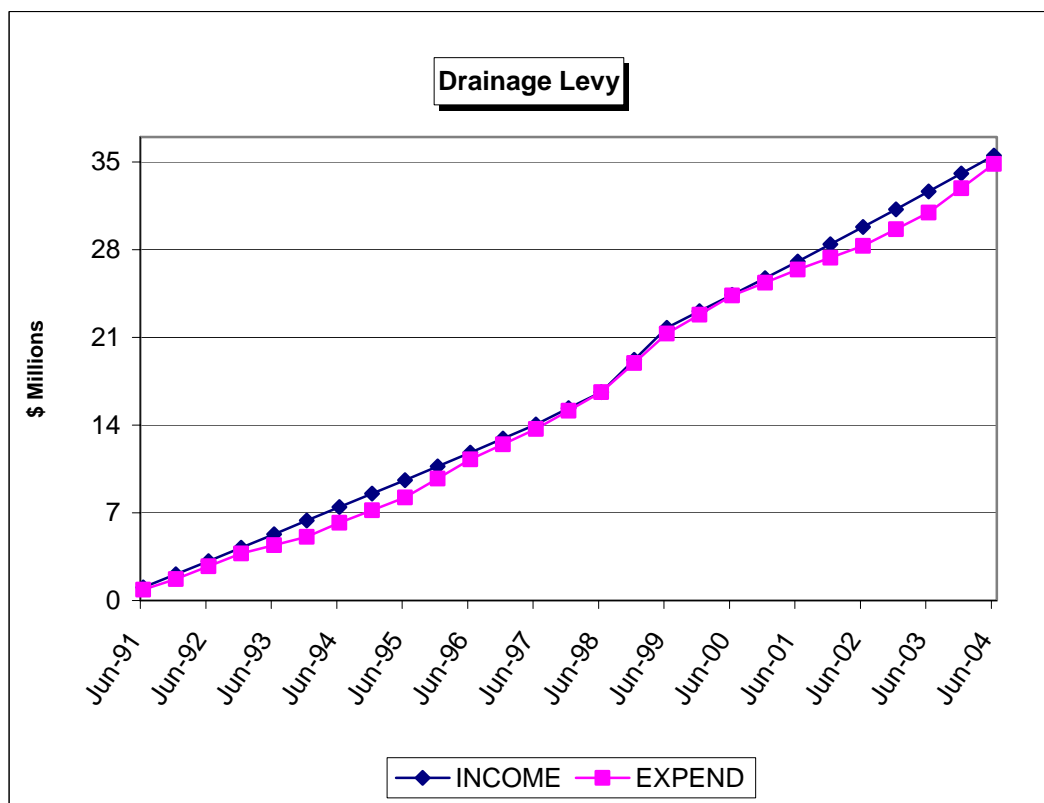


FIGURE 2 Council's expenditure against income for drainage levy

6.4. Outstanding Works And Strategy

The flooding that has occurred in Gosford is widespread. Council has performed numerous detailed flooding and drainage related studies and plans to accurately determine the flooding problems, investigate the most economical whilst environmentally satisfactory option, and then recommend the most appropriate strategy. These studies have intensely investigated various catchments to date and have identified many more drainage and flooding inadequacies than that had been previously estimated.

As each study is completed, Council adds the identified works to its Forward Plan of Works. To date the list of outstanding works has risen from \$70M to \$138M.

For new developments, Council requires that they comply with the current standard which is to address flows up to the 1% AEP flood event. However, when upgrading its existing systems, Council is only providing a standard that alleviates the flooding to houses and not to all land. In addition, where the cost to provide works to alleviate the existing problem is not cost effective, Council has set Minimum Floor Levels (MFL) for new development on those properties. It is therefore not setting an unrealistically high standard and aiming to make all existing properties flood free up to the 1% AEP flood event. Council is attempting to find cost effective solutions and use the Drainage Levy funds to mitigate many problem areas each year.

6.5. Council's Ability To Fund

With Council having limitations on general rate revenue due to rate pegging, and also with the State and Federal Governments reducing their commitment to flood funding, there is little opportunity for Council to obtain funding assistance for drainage and flood mitigation works.

Funding assistance is available from the government for flood mitigation, and until recently drainage works. However this funding is severely limited and competitive.

To assist with the completion of drainage Capital Works Council resolved in 2001 to commence using Water and Sewerage available funds. The budget for 2004/2005 is \$3,000,000. This funding was provided in accordance with the provisions of the Water Management Act 2000.

6.6. Standards For Flooding And Drainage Works

In addition, various government departments are requiring Councils to comply with upgraded, revised or new regulations, which take into consideration the existing environment.

For example, the Department of Infrastructure Planning and Natural Resources (DIPNR) under the Rivers and Foreshores Improvement Act requires Council to design and construct its drainage systems that affect watercourses to maintain the natural state of the watercourse where practical and to reintroduce native flora and thus improve native fauna habitat. This type of treatment, whilst environmentally friendly, is also very costly and requires a higher level of maintenance in restricted urban areas so as not to cause increased flooding.

Further, EPA requires Councils to implement water quality improvement programs within all existing and proposed drainage systems. To comply with this condition requires consideration of the installation of gross pollutant traps, nutrient filters, wetlands and sedimentation traps which, increase the cost of the overall drainage system. Council has been very careful however to ensure it does not allocate any Drainage Levy funds to purely environmental projects.

NSW State Fisheries is now enforcing the new Fisheries Management Act, which generally requires no net loss of aquatic habitat and also to design watercourse upgrades to allow fish passage and improve habitat eg improved riparian vegetation.

In addition, with the introduction of the Threatened Species Management Act, Council is now required to perform extensive environmental studies and provide amelioration measures to maintain any threatened species habitat particularly in the riparian zone of watercourses.

The above revised or new regulations will mean that the cost of most upgrading work will increase.

6.7. Capital Works Program

The Capital Works Program is being constantly expanded as each new drainage or flood study is completed. With only approximately half of the major populated areas investigated to date it is unlikely that the program will reduce. The program, a copy of which is attached, lists all the outstanding works identified to date in present day dollars.

An allowance was included in the 2003/2004 capital works program for project investigation and supervision of \$444,000 per annum. An allowance has also been included of \$15,000 for design by consultants, \$40,000 per year for consultant investigation, \$23,000 per year for Minor Drainage Improvement Program (i.e. a program of small drainage works each not exceeding \$10,000). No funds were allocated to purchase flood liable land in 2003/2004.

In addition it should be noted that Council is investigating ways of reducing the cost of improving drainage in Woy Woy. If successful the Council expects to reduce the cost which is currently approximately \$51M.

The program does not include works required under a Development Control Plan. These works are funded from S94 plans with funds from developer contributions.

6.8. Alternate Funding Proposals To Execute Work

Under current funding, it is unlikely that the program can be completed within the next 60 years. However with increased funding it could accelerate the program. The following options are considered available to Council.

Option 1: No annual change in levy
Under this option, the program of works could not be completed under 60 years

Option 2: Accelerated program with use of loans and an increase on the drainage levy

Under this option, if the Drainage Levy could be used to finance loans for major capital works then in the short term a large proportion of the outstanding program could be completed within the next 10 to 15 years. However, given the current low level of the drainage levy only a minor portion of the backlog work could be brought forward. This option would mean that some ratepayers would benefit from their contributions in an earlier timeframe. However increased funds would be necessary to accelerate design, property acquisition, project planning and associated costs currently met by recurrent funding. The effectiveness of acceleration will be impacted by the cost of loan funds and may extend the duration of funding required.

6.9. Summary

With any increase in funding there will be a reduction in outstanding works. The benefits would be a reduction in the incidence of flooding to properties and also the likelihood of properties being affected by larger flood events.

The Gosford area can experience periods of intense localised rainfall, which requires the provision of adequate drainage systems. These systems are required to convey and discharge stormwater and flood flows so as to reduce the overall chance of flooding to houses and property. In September 2001, over ten (10) houses were flooded in Copacabana as a result of only a short duration storm event.

The standards and levels of service applicable to drainage are difficult to prioritise and it is difficult to determine when standards are 'adequate'. This is particularly a problem with drainage because the problems are very difficult to visualise and are only certainly realised every now and again and often ten or more years apart.

However, when severe storms occur with resultant damage, it is often devastating to the community, causes a high level of destruction, is essentially uninsurable and causes social and psychological trauma. The outcomes in Wollongong, Nyngan and Coffs Harbour are clear examples of the problems.

The Drainage Levy has enabled Council to address the highest priorities and its continuance at a reasonable level is necessary to reduce the current 60 year backlog.

While the projects that have been completed are beneficial the backlog far exceeds the funding available. The drainage levy has been reduced in real terms over recent years. An increase in the levy above CPI is sought to advance this important program to reduce the extended backlog and reduce the risk of localised and damaging flooding. Council would then like to retain the value of the levy in real terms. Even with this increase the time to overcome problems is extensive and many properties continue to face the risk of flooding.

Projects successfully completed using Drainage Levy funding include:

- Althea Place Stage 1, Point Clare
- Althea Place Stage 2, Point Clare
- Australia Avenue Drainage, Umina
- Avoca Bowl Trunk Drainage, Hunts Lane
- Bounty Road, Avoca
- Bradys Gully Creek, Wyoming Trunk Drainage
- Coburg Street, East Gosford Trunk Drainage
- Copacabana Area (Segura/Del Monte St) Trunk Drainage

Copacabana Main Drain Trunk Drainage
Copacabana Trunk Drainage (section)
Cutrock Creek, Lisarow Trunk Drainage
Davistown Road Trunk Drainage
Drainage Diversion, Henry Parry Drive/Lushington Street
Duke Street Drainage, Gosford
Easement Acquisitions under Lisarow DCP
East Gosford Trunk drainage - Hylton Moore Park
East Gosford Trunk Drainage (Section X)
East Gosford Trunk Drainage Stage 3 Hylton Moore to Coburg Street
East Gosford Trunk Drainage, Hylton Moore Park
Emerald Avenue Culvert, Pearl beach
Erina Street Drainage, Gosford CBD
Florence Avenue, Pt Frederick Trunk Drainage
Gosford CBD Trunk Drainage
Gosford CBD Trunk Drainage
Grassland Catchment, Terrigal Trunk Drainage
Havenview Catchment stage 2 culverts
Havenview Catchment (u/s hotel) Terrigal
Havenview Catchment, Terrigal, Stage Works u/s of Primary School
Hillcrest Street Public School, Terrigal
Kincumber Trunk drainage (Carrak Road)
Koolinda Avenue, Point Clare, Concrete Drains
Lake St, Avoca Trunk Drainage
Narara Creek, Narara Trunk Drainage
Nooree Lane, Avoca Trunk Drainage
Nooree Lane, Avoca
Paton Street Drainage, Woy Woy
Patonga Area Trunk Drainage
Pearl Beach Area Trunk Drainage (Tourmaline Avenue Culvert)
Peninsula Infiltration
Peninsula Infiltration Traps
Point Clare Area Trunk Drainage
Ross/Rowan Catchment, Woy Woy Trunk Drainage
Surfrider Avenue, North Avoca Trunk Drainage
Swagman/Billabong St, Woy Woy Trunk Drainage
Tourmaline Avenue Culvert, Pearl Beach
Veron/Dulkara (Catholic School) Culvert
Vista Avenue Drainage, Copacabana
Vista Avenue, Copacabana, pipe watercourse
Warwick/Wallaby Catchment, Woy Woy Major Drainage
Warwick/Wallaby Street 506, Woy Woy
Wingello Creek, Wyoming Trunk Drainage
Woy Woy Peninsula Infiltration Works
Wyoming Creek, Wyoming Trunk Drainage

GOSFORD CITY COUNCIL

OUTSTANDING STORMWATER DRAINAGE WORKS as at 30/06/2004

Year	Suburb	Project Title/Description	Costing (\$)
2005+	Avoca 1	Hillside Rd/ Round Dr - Trunk Drainage	60,000
2005+	Avoca 2	Peel St - Street Drainage	60,000
2005+	Avoca 3	Lake St - Trunk Drainage Stage 2	100,000
2005+	Avoca 4	Beachcomber Pde North Avoca - Provide Secondary Flowpath over Lot 243	15,000
2005+	Avoca Bowl 1	Line Middle - Upgrade 4 culverts/ channel	100,000
2005+	Avoca Bowl 2	Right Branch - Culvert Fairsce Cr	15,000
2005+	Avoca Bowl 3	Line North - Construction	150,000
2005+	Avoca Bowl 4	Line North - Design and Acquisition	25,000
2005+	Avoca Bowl 5	Line West - Design and Construction of Culvert	15,000
2005+	Avoca Bowl 6	Endeavour Dr/ Avoca Dr - Trunk Drainage Construction	350,000
2005+	Copacabana 1	Chico St - Design and Construct Line	15,000
2005+	Copacabana 2	Del Mar Dr - Design and Construct Line	30,000
2005+	Copacabana 3	Del Monte Pl - Design and Construct Line	300,000
2005+	Copacabana 4	Copacabana Park Drainage - Construction of Main Channel	250,000
2005+	Copacabana 5	Del Rio Dr/ Segura St/ Vesta Av Construct Drainage Lines	331,000
2005+	Copacabana 6	Ensenada Rd/ Fiesta Cr - Design and Construct Line	150,000
2005+	Copacabana 7	Ensenada Rd/ Puebelo St - Design and Construct Line	100,000
2005+	Copacabana 8	Fiesta Cr/ Del Mar Dr - Design and Construct Line	60,000
2005+	Copacabana 9	Vesta Av/ Oceano St - Improve Collection and Drainage Lines	120,000
2005+	Davistown 1	Davistown Drainage Investigation	50,000
2005+	Davistown 2	Davistown Trunk Drainage Construction	1,500,000
2005+	Davistown 3	Mireen Av - Pipe DE over Lots 140 - 155 Lintern St	22,000
2005+	East Gosford 1	Marshdale Rd/ Moreall Cl - Design and Construction of Drainage Line	36,000
2005+	East Gosford 10	Frederick St/ Russell Drysdale St Line 6 - Design and Construction of Trunk Drainage	590,000
2005+	East Gosford 11	Lushington St/ Henry Parry Dr Line 7 - Design and Construction of Trunk Drainage	1,010,000
2005+	East Gosford 12	Melbourne St/ Webb St Line 9 - Design and Construction of Trunk Drainage	210,000
2005+	East Gosford 13	Masons Pde/ Henry Parry Dr Line 13 - Design and Construction of Trunk Drainage	1,840,000
2005+	East Gosford 2	George St to Erina Creek - Design and Construction of Drainage Line	250,000
2005+	East Gosford 3	Russell St/ Hilton Moore Park - Construction of Trunk Drainage	500,000
2005+	East Gosford 4	Russell St/ Victoria St - Design and Construction of Trunk Drainage	203,000
2005+	East Gosford 5	Russell St/ York St Line 12 - Design and Construction of Trunk Drainage	235,000
2005+	East Gosford 6	Lushington St/ Coburg St Stage 5 Line 13 - Construction of Trunk Drainage	2,700,000
2005+	East Gosford 7	Althorp St Line 17 - Design and Construction of Trunk Drainage	220,000
2005+	East Gosford 8	Maitland Rd/ Wells St/ Green Plateau Rd Line 18 - Design and Construction of Trunk Drainage	1,732,000
2005+	East Gosford 9	Newcastle St/ Maitland Rd/ Wells St Line 23 - Design and Construction of Trunk Drainage	1,200,000
2005+	Empire Bay 1	Empire Bay Ave - Drainage Study	40,000
2005+	Empire Bay 2	Boongala Av - Extension of Existing Drainage System Stage 4	100,000
2005+	Empire Bay 3	Empire Bay Ave - Design and Construction of Trunk Drainage	2,000,000
2005+	Empire Bay 4	Greenfield Rd - Acquisition of Easement	70,000
2005+	Empire Bay 5	Rickard and Rosella Rd's - Acquisition	100,000
2005+	Empire Bay 6	Shelly Beach Rd - Provide Collection and Drainage	28,000
2005+	Empire Bay 7	Sorrento Rd - Pipe DE over Lots A & B DP 401805	6,000
2005+	Empire Bay 8	Yugari Cr, Empire Bay	23,000
2005+	Empire Bay 9	Shelly Beach Rd Area - Drainage Investigation	20,000
2005+	Erina 1	Erina Creek Flood Mitigation - Acquire Easements	10,000

Year	Suburb	Project Title/Description	Costing (\$)
2005+	Erina 2	The Entrance Rd - Bypass open Drain over Lot A DP 1976	28,000
2005+	Forresters Beach 1	Kalakau Av - Construct Additional Pits and Drains	200,000
2005+	Forresters Beach 2	Crystal St - Pipe open Drain, Low Point adjacent Playground	15,000
2005+	Forresters Beach 3	Crystal St - Pipe Open Drain from Noorong Av to The?	65,000
2005+	Forresters Beach 4	Forresters Bay Area - Design/ Acquisition/ Construction for Drainage	750,000
2005+	Forresters Beach 5	Forresters Bay Area - Drainage Study	15,000
2005+	Gosford 1	Brisbane Water - FPM Study/ Plan	100,000
2005+	Gosford CBD 3	Repayment of Loan	324,000
2005+	Gosford CBD 4	Repayment of Loan	324,000
2005+	Gosford CBD 5	Repayment of Loan	324,000
2005+	Gosford CBD 6	Repayment of Loan	324,000
2005+	Gosford CBD 7	Repayment of Loan	324,000
2005+	Gosford CBD 8	Repayment of Loan	324,000
2005+	Green Point 1	Sun Valley Rd Ck - Flood and FPM Studies and Plan	50,000
2005+	Green Point 2	Sun Valley Rd Ck - Land Acquisition	35,237
2005+	Green Point 3	CP-42 Drainage Land Acquisition	310,936
2005+	Green Point 4	CP-42 Terrigal Ck - Channel Construction Works	644,658
2005+	Green Point 5	Asca Av - Pipe Public Pathway adjacent #66 and #185	18,000
2005+	Hardys Bay 1	Araluen Dr - Repair Drainage Problem Behind Existing ?	30,000
2005+	Hardys Bay 2	Araluen Dr /Stanley St - Purchase of DE and Construction of Drain	60,000
2005+	Hardys Bay 3	Araluen Dr - Pipe Drainage Easement No. 156 Araluen Dr	10,000
2005+	Hardys Bay 4	Fraser Rd - Pipe DE over Lot 53	15,000
2005+	Hardys Bay 5	Heath Rd - Pipe DE Over Lot 1723	12,000
2005+	Holgate 1	Oak Rd - Culvert 200m Sth of McGarrity Cr	90,000
2005+	Holgate 2	Paroo Rd/ Wattle Tree Rd - Pipe DE Over Lot 44	12,000
2005+	Horsefield Bay 1	Monastir Rd - Trunk Drainage Upgrade and Siltation Trap	80,000
2005+	Kariong 1	Kariong Catchment - Construct Trunk Drainage	400,000
2005+	Killcare 1	Mudflat Creek - Flood Mitigation Works Construction Stage 1	100,000
2005+	Killcare 10	Mudflat Ck - Acquisition of Drainage Easement	100,000
2005+	Killcare 2	Mudflat Creek - Flood Mitigation Works Construction Stage 2	225,000
2005+	Killcare 3	Fraser Rd Flood and FPM Studies	50,000
2005+	Killcare 4	The Scenic Rd/ Noble Rd - Stage 3	150,000
2005+	Killcare 5	The Scenic Rd/ Noble Rd - Stage 4	150,000
2005+	Killcare 6	The Scenic Rd/ Noble Rd - Stage 5	1,230,000
2005+	Killcare 7	Blythe St/ Araluen St - Design of Drainage Works	20,000
2005+	Killcare 8	Blythe St/ Araluen St - Construction of Culverts/GPT/Other Improvements	150,000
2005+	Killcare 9	Mudflat Creek - Design of Channel Works	20,000
2005+	Kincumber 1	CP - 16 Relocate Water Main	5,500
2005+	Kincumber 10	Booragil CI - Design and Construct Trunk Drainage	25,000
2005+	Kincumber 11	Carlo CI/ Joalah Rd - Design Trunk Drainage	25,000
2005+	Kincumber 12	Carlo CI/ Joalah Rd - Construct Trunk Drainage/ GPT	780,000
2005+	Kincumber 13	Gunya Rd/ Tilba St - Design Trunk Drainage	20,000
2005+	Kincumber 14	Gunya Rd/ Tilba St - Construct Trunk Drainage	680,000
2005+	Kincumber 15	Caneo PI Catchment - Design and Construct Trunk Drainage	200,000
2005+	Kincumber 16	Karuah Ave Catchment - Design and Construct Drainage for Algonia Av	10,000
2005+	Kincumber 17	Seabreeze Ave Catchment - Design and Construct Drainage for Avoca Dr	53,000
2005+	Kincumber 18	Moro CI/ Davies St - Design Trunk Drainage	25,000
2005+	Kincumber 19	Moro CI/ Davies St - Construct Trunk Drainage/GPT	2,000,000
2005+	Kincumber 2	Avoca Dr Lot 15 Trunk Drainage	50,005
2005+	Kincumber 20	Samantha Cr - Construct OFF	7,000
2005+	Kincumber 21	Water St/ Wallan Rd - Drainage Construction Stage 2	200,000
2005+	Kincumber 22	Yarto CI - Design and Construct Trunk Drainage	15,000
2005+	Kincumber 3	Easement Acquisition Lot 15 Avoca Dr	42,373

Year	Suburb	Project Title/Description	Costing (\$)
2005+	Kincumber 4	Kincumber Rd/ Bungoona Rd/ Avoca Dr Trunk Drainage	141,903
2005+	Kincumber 5	Kookaburra St to Bungoona Rd Trunk Drainage	221,029
2005+	Kincumber 6	Drainage Land Acquisition	70,494
2005+	Kincumber 7	Water St/ Wallan Rd - Drainage Construction Stage 1	200,000
2005+	Kincumber 8	Water St/ Wallan Rd - Construct Pipe Drainage Stage 2	100,000
2005+	Kincumber 9	Water St/ Wallan Rd - Construct Pipe Drainage Stage 2	150,000
2005+	Kincumber South 1	Humphrey Rd - Pipe Open Drain Over Lot 5	10,000
2005+	Koolewong 1	Nimala Ave/ Nimbin Rd - Pipe Open Channel	25,000
2005+	Kulnura 1	Wisemens Ferry Rd - Culvert at Chainage 21.1 Km	16,000
2005+	Lisarow 1	Retarding Basin Construction	84,000
2005+	Lisarow 2	Retarding Basin Construction	116,000
2005+	Lisarow 3	Cutrock Ck Flood Mitigation Works - Tall Timbers Estate Bridge access	100,000
2005+	Lisarow 4	Cutrock Ck Flood Mitigation Works - Tall Timbers Estate Bank Protection	100,000
2005+	Lisarow 5	CP - 8 Acquire Land for Drainage Works	408,500
2005+	Lisarow 6	Taylor Rd - Trunk Drainage Link	35,024
2005+	Lisarow 7	Lisarow St - Pipe Watercourse at Rear of Lots on Western Side	36,000
2005+	MacMasters Beach 1	Cockrone Lagoon - Investigate and Assess Let out Level	30,000
2005+	Middle Ck 1	Flood Mitigation Works	64,000
2005+	Middle Ck 2	Flood Mitigation Works	225,000
2005+	Middle Ck 3	Flood Mitigation Works	254,000
2005+	Middle Ck 4	Flood and FPM Studies	30,000
2005+	Narara 1	Narara Valley Dr Bridge - Design and Construct	450,000
2005+	Narara 10	CP-5 Fountain/ Reeves/ Narara Ck - Channel Alignment	268,092
2005+	Narara 11	CP-5 Fountain Creek/ Reeves Creek - Construction of Wet Basin	373,336
2005+	Narara 12	CP-5 Acquire Drainage Land	10,800
2005+	Narara 13	Barree Av - Pipe DE's to SH10 Pacific Hwy	45,000
2005+	Narara 14	Manns Rd/ Wananda Rd - Construction of Collection/ Pipe Drainage	25,000
2005+	Narara 15	Narara Cr - Pipe DE Over Lot 11 DP 29905	14,000
2005+	Narara 16	Narara Valley Dr - Pipe Open Drain Over #4	8,000
2005+	Narara 2	Upper Narara Creek Narara Valley Dr and Deane St - Channel Works Design and Construct	100,000
2005+	Narara 3	Upper Narara Valley Flood Mitigation Works - Bridge Over Tributary	280,000
2005+	Narara 4	Upper Narara Valley Flood Mitigation Works - Access Road Willari	50,000
2005+	Narara 5	Upper Narara Valley Flood Mitigation Works - Prepare Evacuation Plan	20,000
2005+	Narara 6	Upper Narara Valley Flood Mitigation Works - Manns Rd and Deane St Stage Construction	300,000
2005+	Narara 7	Upper Narara Valley Flood Mitigation Works - Carrington St and Manns Rd Stage Construction	300,000
2005+	Narara 8	Wingello Ck Flood Mitigation Works - Pecan CI Retarding Basin Improvement	280,000
2005+	North Gosford 1	Etna St - Improve Drainage Collection	30,000
2005+	Patonga 1	Lower Hawkesbury River - FPM Plan	80,000
2005+	Patonga 1	Patonga Area - Trunk Drainage Stage Construction	125,000
2005+	Pearl Beach 1	Green Point Creek - Voluntary Purchase of Flood Liable House	260,000
2005+	Pearl Beach 2	Garnet Rd/ Diamond Rd - Trunk Drainage Construction Stage 1	150,000
2005+	Pearl Beach 3	Garnet Rd/ Diamond Rd - Trunk Drainage Construction Stage 2	1,150,000
2005+	Point Clare 1	Point Clare Area Trunk Drainage - Stage Construction	150,000
2005+	Point Clare 2	Kurrawah Ave - Carpark Construction	1,000
2005+	Point Clare 3	Nioka Ave - Trunk Drainage Works	150,000
2005+	Point Clare 4	Penang St - Pipe Drain at rear of Jacaranda Village	20,000
2005+	Point Clare 5	Point Clare Area Trunk Drainage - Stage Construction	550,000
2005+	Pretty Beach 1	Turo Ck - Flood Mitigation Works Stage 1	70,000
2005+	Pretty Beach 2	Turo Ck - Flood Mitigation Works Stage 2	144,000
2005+	Pretty Beach 3	Turo Ck - Flood Mitigation Works Stage 3	150,000

Year	Suburb	Project Title/Description	Costing (\$)
2005+	Pretty Beach 4	Turo Ck - Flood Mitigation Works Stage 4	225,000
2005+	Pretty Beach 5	Turo Ck FPM Study	50,000
2005+	Pretty Beach 6	Highview Rd - Street Drainage	40,000
2005+	Pretty Beach 7	Pretty Beach Area Trunk Drainage - Design/Acquisition/Construction	570,000
2005+	Saratoga 1	Broadwater Dr - Pipe DE Lot 81	1,000
2005+	Saratoga 2	Davistown Rd/ Patrick Cr - Design/ Construction of Drainage System	450,000
2005+	Saratoga 3	Broadwater/ Davistown Rd/ Jirramba Ave - Design/ Construction of Drainage System	550,000
2005+	Saratoga 5	Weston St	18,000
2005+	Saratoga 6	Wilki/ King Av - Pipe Open Channel	15,000
2005+	Springfield 1	Drainage Land Acquisition	18,809
2005+	Springfield 2	Clarence Rd - EIS and Outlet Works	90,000
2005+	Springfield 3	Green Plateau Rd - Pipe DE over Lot 45	10,000
2005+	Springfield, East Gosford 1	Lushington/ Coburg St - Construction Stage 4	150,000
2005+	Springfield, East Gosford 2	Lushington/ Coburg St - Construction Stage 5	200,000
2005+	Terrigal CBD 10	Tennis Court to Open Channel - Design and Construct Trunk Drainage	176,000
2005+	Terrigal CBD 11	Wilson Rd/ Boomerang Rd - Design and Construct Trunk Drainage	87,000
2005+	Terrigal CBD 12	Scenic Hwy - Design and Construct Trunk Drainage	72,000
2005+	Terrigal CBD 3	Church St/ Campbell Cr - Construct Trunk Drainage	450,000
2005+	Terrigal CBD 4	Grosvenor Rd/ Kurrawyba Av - Design and Construct Trunk Drainage	179,000
2005+	Terrigal CBD 5	Painters Lane - Design and Construct Trunk Drainage	84,000
2005+	Terrigal CBD 6	Wilson Rd/ Grosvenor Rd - Design and Construct Trunk Drainage	282,000
2005+	Terrigal CBD 7	Henley Av/ Wilson Rd - Design and Construct Trunk Drainage	172,000
2005+	Terrigal CBD 8	Kurrawyba Av/ Boomerang Rd - Design and Construct Trunk Drainage	70,000
2005+	Terrigal CBD 9	Scenic Hwy - Design and Construct Trunk Drainage	53,000
2005+	Terrigal Grasslands 1	Terrigal Creek Channel Works	496,258
2005+	Terrigal Riviera 1	Lagoon to Ena St - Trunk Drainage Construction Stage 4	250,000
2005+	Terrigal Riviera 10	Junction Rd - Construct Trunk Drainage	44,000
2005+	Terrigal Riviera 11	Parry Av/ Chantell Av - Construct Trunk Drainage	145,000
2005+	Terrigal Riviera 12	Parry Av/ Riviera Av/ Travelly Cl - Construct Trunk Drainage	154,000
2005+	Terrigal Riviera 13	Travelly Cl/ Casino St - Aquire DE	120,000
2005+	Terrigal Riviera 2	Ena St - Construct Side Lines	200,000
2005+	Terrigal Riviera 4	Chantell Av - Construct Trunk Drainage	320,000
2005+	Terrigal Riviera 5	Barnhill Rd - Construct Trunk Drainage	80,000
2005+	Terrigal Riviera 6	Cottee Cr - Construct Trunk Drainage	45,000
2005+	Terrigal Riviera 7	Martin Pl - Construct Trunk Drainage	70,000
2005+	Terrigal Riviera 8	Trevally Cl - Construct Trunk Drainage	114,000
2005+	Terrigal Riviera 9	Casino St/ Riviera East - Construct Trunk Drainage	160,000
2005+	Umina 1	Kahibah Ck - Remaining Flood Mitigation Works	1,530,000
2005+	Umina 2	Brisbane Av - Street Drainage	120,000
2005+	Umina 3	Gallipoli Av, Trafalga to Banksia - Stage 2 Street Drainage	80,000
2005+	Umina 4	Iluka - Drainage System Stage 2	60,000
2005+	Umina 5	Osbourne Av - Street Drainage	12,000
2005+	Umina 6	Poziers/ Birdwood Ave - Street Drainage	96,000
2005+	Umina 7	Priestman Ave - Street Drainage	60,000
2005+	Umina 8	Stella Rd - Improve Drainage/ Collection near Intersection	25,000
2005+	Umina 9	Catchment PO, Trafalgar St/ Ocean Beach Rd - Investigation/Design/Acquisition/Construction	13,164,000
2005+	Various 1	Review all FS, FPMP	200,000
2005+	Various 10	Acquisition of DE at Various Locations	20,000
2005+	Various 11	Minor Drainage Improvement Woks 2003 to 2043 (40 Yrs @ 25K)	2,000,000
2005+	Various 2	Review all FS, FPMP	200,000

Year	Suburb	Project Title/Description	Costing (\$)
2005+	Various 3	Review of FS and FPMP	255,000
2005+	Various 4	Design of Drainage and Flood Mitigation Works	25,000
2005+	Various 5	Minor Drainage Improvement Works	50,000
2005+	Various 6	Purchase of Flood Liable Land for Flood Mitigation Works	25,000
2005+	Various 7	Drainage Designs 2003 to 2043 (40 Yrs @ 25K)	1,000,000
2005+	Various 8	Purchase of flood Liable Land 2003 to 2043 (40 Yrs @ 25K)	1,000,000
2005+	Various 9	Investigation and Project Management 2003 to 2043 (40 Yrs @ 25K)	11,200,000
2005+	Wagstaffe 1	Wagstaffe Area - Construct Trunk Drainage Stage 1	200,000
2005+	Wagstaffe 2	Wagstaffe Area - Construct Trunk Drainage Stage 2	530,000
2005+	Wamberal 1	Aldinga Dr - Pipe Benwerrin Rd Stage 3	150,000
2005+	Wamberal 2	Aspen/ Willoughby Rd's - Improve Collection	10,000
2005+	Wamberal 3	Benwerrin Rd - Augment Existing Drainage System	20,000
2005+	Wamberal 4	Blue Bell Dr - Trunk Drainage Piping Easement	50,000
2005+	Wamberal 5	Brush Rd - Drainage Improvement works	36,000
2005+	Wamberal 6	Leonard Av/ Hilltop Rd - Upgrade Drainage at Various Intersections	100,000
2005+	Wamberal 7	Tall Timbers Rd - Pipe DE to Wamberal Lagoon	150,000
2005+	Wamberal 8	Tumbi Rd - Upgrade Existing Culvert Opposite Lot 39 A	35,000
2005+	West Gosford 1	Freshwater Ck - Flood and FPM Studies	40,000
2005+	West Gosford 2	Donnison St - Flood Relief Works Stage 1	50,000
2005+	West Gosford 3	Pacific Hwy - Pipe DE Adjacent to RTA	45,000
2005+	West Gosford 4	West Gosford Industrial Areas - Stage 2	60,000
2005+	Wisemans Ferry 1	Wisemans Ferry Rd - Pipe DE over LOT 402	12,000
2005+	Woy Woy Peninsula 1	Veron Rd/ Dulkara Rd - Trunk Drainage Construction Stage 2	150,000
2005+	Woy Woy Peninsula 10	North Burge Rd - Street Drainage	96,000
2005+	Woy Woy Peninsula 11	Plane St - Street Drainage	18,000
2005+	Woy Woy Peninsula 12	Regina St - Street Drainage	96,000
2005+	Woy Woy Peninsula 13	Veron Rd/ Dulkara Rd Karloo Rd to Timbertop Dr - Street Drainage Acquisition and Construction	700,000
2005+	Woy Woy Peninsula 14	Veron Rd/ Dulkara Rd Dulkara Rd to Gilwah St - Street Drainage Design, Acquisition and Construction	265,000
2005+	Woy Woy Peninsula 15	Veron Rd/ Dulkara Rd Karingal Cl to Outlet - Street Drainage Design, Acquisition and Construction	282,000
2005+	Woy Woy Peninsula 16	Veron Rd/ Dulkara Rd Numby Cl/ Lentara Rd - Street Drainage Design, Acquisition and Construction	214,000
2005+	Woy Woy Peninsula 17	Veron Rd/ Dulkara Rd Shoalhaven Dr/ Karingal Cl - Street Drainage Design, Acquisition and Construction	123,000
2005+	Woy Woy Peninsula 18	Warwick/ Wallaby/ Warrigal St - Stage Construction	50,000
2005+	Woy Woy Peninsula 19	Catchments AB, AC, AK, AL - Design, Acquisition and Construction	18,338,000
2005+	Woy Woy Peninsula 2	Catchment BC - Trunk Drainage Construction Stage 2	875,000
2005+	Woy Woy Peninsula 20	Catchment AA Carpenter St/ Shepard St - Construction of Trunk Drainage	3,500,000
2005+	Woy Woy Peninsula 21	Catchment D Paton St/ Melba Rd/ Station St - Design/ Acquisition/ Construction	1,895,000
2005+	Woy Woy Peninsula 22	Catchment E Blackwall Rd/ Brick Wharf Rd - Design/ Acquisition/ Construction	1,912,000
2005+	Woy Woy Peninsula 23	Catchment F - Design/ Acquisition/ Construction	786,880
2005+	Woy Woy Peninsula 24	Catchment G - Design/ Acquisition/ Construction	936,390
2005+	Woy Woy Peninsula 25	Catchment H - Design/ Acquisition/ Construction	1,868,970
2005+	Woy Woy Peninsula 26	Catchment J - Design/ Acquisition/ Construction	7,107,160

Year	Suburb	Project Title/Description	Costing (\$)
2005+	Woy Woy Peninsula 27	Catchment K Warwick/ Wallaby - Design/ Acquisition/ Construction	217,000
2005+	Woy Woy Peninsula 28	Catchment L - Design/ Acquisition/ Construction	2,694,000
2005+	Woy Woy Peninsula 29	Catchment M - Design/ Acquisition/ Construction	7,520,000
2005+	Woy Woy Peninsula 3	Catchment BC - Trunk Drainage Construction Stage 3	450,000
2005+	Woy Woy Peninsula 30	Catchment N - Design/ Acquisition/ Construction	6,833,000
2005+	Woy Woy Peninsula 31	Woy Woy Rd, South Woy woy - Pipe Local Low Point	18,000
2005+	Woy Woy Peninsula 32	Woy Woy Peninsula - Trunk Drainage Stage Construction	115,325
2005+	Woy Woy Peninsula 4	Catchment BC - Trunk Drainage Construction Stage 4	500,000
2005+	Woy Woy Peninsula 5	Veron Rd/ Dulkara Rd - Trunk Drainage Construction Stage 3	700,000
2005+	Woy Woy Peninsula 6	Catchment BC - Trunk Drainage Construction Stage 5	2,480,000
2005+	Woy Woy Peninsula 7	Blackwall Rd - Street Drainage	60,000
2005+	Woy Woy Peninsula 8	Everglades - Main Channel	250,000
2005+	Woy Woy Peninsula 9	Koonora Av - Orange Grove Rd to Reserve	6,000
2005+	Wyoming 1	Blanche St - Construct Pipe Drainage Stage 2	150,000
2005+	Wyoming 2	Blanche St - Construct Pipe Drainage Stage 3	200,000
2005+	Wyoming 3	Binya Av - Eliminate Dish Drain	15,000
2005+	Wyoming 4	Chestnut St - Pipe DE over Lot 49	24,000
2005+	Wyoming 5	Elizabeth St - Upgrade Trunk Drainage	100,000
2005+	Wyoming 6	Gazelle/ Chamberlain Rd - Wyoming Creek Increase Water Course Capacity	123,000
2005+	Wyoming 7	Halcyon St - Pipe DE from Public School to Jarrett St	156,000
2005+	Wyoming 8	Blanche St - Construct Pipe Drainage Stage 4	400,000
2005+	Yattalunga 1	Bourke Av - Pipe DE Over Lot 67	15,000

NUMBER OF PROJECTS 262**ESTIMATED COST 137,290,679.00**

7. CURRENT PRICING STRUCTURE

7.1. Water Supply and Sewerage Services

All properties with access to water and/or sewerage services supplied to the property, regardless of whether connection has been made pay an availability charge for the services provided.

7.2. Water Service Charges

All single residences and residential strata properties and vacant land with access to a water main are currently charged a water service charge of \$72.47 per annum (2004/2005).

All non-residential properties with access to water services are charged in accordance with Table 7.2, relevant to the size of the meter servicing the property. Where more than one meter exists on a property, the sum of all meter charges will be levied. For large users with a number of connections and property maintains fire services and normal water service meters, the property will be charged with either the sum of fire service charges or the sum of water service charges, whichever is the greater.

Table 7.2 Water Service Charges in 2004/05

Meter Size	Water Service Charge	Fire Service Charge
20mm	\$72.47	\$36.24
25mm	\$113.24	\$56.63
32mm	\$185.53	\$97.77
40mm	\$289.90	\$144.95
50mm	\$452.97	\$226.48
65mm	\$765.52	\$382.76
80mm	\$1,159.60	\$579.80
100mm	\$1,811.87	\$905.94
150mm	\$4076.72	\$2038.36
200mm	\$7247.50	\$3,623.75
>200mm	$(\text{service size})^2 \times \$72.47/400$	Half service charge

7.3. Water Usage Charge

All water consumed, regardless of property type or land usage is currently charged at \$0.755 per kilolitre (2004/2005). This is consistent with the Tribunal's determination May 2002 Water usage charge.

7.4. Residential Sewerage Service Charge

All properties with sewerage access are charged \$352.02 per annum.

7.5. Non-residential Sewerage Service Charge

All non-residential properties that are not strata properties, with access to sewerage services are charged in accordance with Table 7.5

Table 7.5 Non-residential Sewerage Service Charges in 2004/05

Water Meter Size	Charge
20mm	\$262.98
25mm	\$410.91
32mm	\$673.24
40mm	\$1,051.93
50mm	\$1,643.63
65mm	\$2,777.74
80mm	\$4,207.69
100mm	\$6,574.52
150mm	\$14,792.67
200mm	\$26,298.07
>200mm	$(\text{service size})^2 \times \$262.98/400$

7.6. Non-residential Sewer Usage Charges

The non-residential usage charge is \$0.755 cents per kilolitre, based on recorded usage at the water meter. A discharge factor is applied to the recorded usage to calculate the relevant usage charge. The default factor is 90%, with the option for non-residential customers to install a separate meter to measure sewerage volume or to apply for an audit of volume discharged as a percentage of water usage recorded.

7.7. Vacant land

For sewerage services available to a vacant property a charge of \$264.02

7.8. Trade Waste Charges

For non-residential properties classified as trade waste discharges, additional charges to the non-residential service and discharge charges apply per Table 7.8

Table 7.8 Trade Waste Charges in 2004/05

Trade Waste Discharge	Charge
Acceptable Quality Excess Volume (per KL)	\$0.20
Unacceptable Quality Volume (per KL)	\$1.30
Biological oxygen demand (per 1,000mg/litre)	\$1.30
Non-filterable residue (per 1,000mg/litre)	\$1.30
Re-inspection fee	\$74.00
Trade Waste application fee	\$65.00

7.9. Stormwater Drainage Services

All properties within the Gosford City Local Government Area pay a stormwater drainage service fee of \$42.00.

7.10. Recoverable Works

The maximum amount chargeable for recoverable works is the direct cost plus internal overheads in accordance with the charge out rates published annually by Council.

7.11. Miscellaneous Charges

Miscellaneous charges are charged in accordance with the Tribunal's determination of May 2002.

7.12. Developer Charges

Developer contributions are calculated in accordance with the Tribunal's determination of September 2000.

7.13. Exempt Properties

The 2002 determination did not result in a decision on charges for exempt properties. In previous years charges were approved on the basis of the service provided to those properties, which were equivalent to the appropriate residential or non-residential water and sewer service and usage charges.

8. PROPOSED WATER AND SEWERAGE CHARGES FROM 2005/06

The Tribunal has not yet determined the length of the price path and Council has based its requirements on detailed data for the period 2005/06 to 2008/09 inclusive. There is within the estimates of future requirements, much uncertainty resulting from the current drought. These uncertainties have been dealt with within this submission and Council would seek the Tribunal's agreement within its determination to allow further interim determinations. As a minimum to maintain the viability of the operation, adjustment within future determinations to accommodate variability of actual circumstances being other than those on which the prices are determined is required.

While the Council's prices are regulated by IPART, it is also regulated by the Department of Energy, Utilities and Sustainability and there has been since the last determination significant legislative changes that permit and require the payment of a dividend for the water and sewerage businesses. Significantly the Department's *Best Practice Management of Water Supply and Sewerage Guidelines* relate to Council water supply or sewerage businesses and apply to Gosford City Council.

The Department has developed and encourages water utilities to plan pricing using its financial model “Finmod” and this tool has been used to assist in determining the charges sought in this submission. While this model is different to that used by IPART it is of value in planning and smoothing the impact of large expenditure peaks.

With the change in legislation relating to dividend payments the Tribunal is requested to ensure that the rate of return used in its building block approach to determining revenue requirements reflect these additional requirements. The charges as submitted include payment of a dividend as provided for by the legislation.

For the purpose of charging for water and sewerage services, the following properties be subject to residential charge:

- Single residential dwellings
- Residential dwelling plus one non-strata flat
- Residential strata unit

All other properties will be subject to the non-residential charge.

8.1. Water Charges from 2005/06

8.1.1. Water Service Charge

All single residences with a 20mm water service be charged a water service charge of \$72.47 plus the CPI percentage change for the twelve month period to March 2005 for 2005/06. In subsequent years charges to be increased by CPI change for the twelve month period.

All other properties with access to water services are charged a water service charge being a multiple of the 20mm service charge based on the size of the water meter as shown in Table 8.1. The availability charges for residential, commercial, industrial and exempt properties are to be the maximum of either the sum of meter size base service charge applicable to the property or the sum of un-metered fire service availability charge. The un-metered fire charge is calculated as 50% of an equivalent size meter service charge.

Table 8.1: Service Charge based on Water Meter Size

Meter Size	Equivalent 20mm multiplier
20mm	1 X 20 mm charge
25mm	1.5625 X 20mm charge
32mm	2.56 X 20mm Charge
40mm	4.00 x 20mm charge
50mm	6.25 x 20mm charge
65mm	10.56 x 20mm charge
80mm	16 x 20 mm charge
100mm	25 x 20m charge
150mm	56.25 x 20mm charge
200mm	100 x 20 mm charge

For meter sizes greater than 200 the availability charge is:

$$(\text{Nominal size})^2 / 400 \times 20\text{mm Availability Charge}$$

The annual water base charge for each unit within a strata development and for vacant land with access to a water main be the same as the 20mm base charge.

8.1.2. Water Usage Charge

Charges for water usage in 2005/06 be set at the current charge per kilolitre plus CPI % change plus 18%. This figure is to be increased by 18% per annum plus CPI in the years 2006/07, 2007/08, 2008/09 and then maintained in real terms in future years.

8.2. Sewerage Charges from 2005/06

The residential sewerage charge shall be a residential sewerage service charge.

Non Residential Sewerage charge shall be comprised of a sewer service charge being an access charge and a usage charge with a minimum charge for any occupied property being the equivalent of a residential sewer service charge.

8.2.1. Residential Sewerage Service Charge

The 2005/06 sewerage service charge for residential properties with a 20mm water service be set at the current charge plus CPI % change plus 5%. This figure is to be maintained in real terms in future years.

Residential Sewerage service charge for vacant land be set at 75% of the residential sewer service charge.

8.2.2. Non Residential Sewerage Service Charge

Non-Residential Sewerage Access Charge be a base access charge as determined by the property's water meter(s) size multiplier, multiplied by the assessed Discharge Factor for the property, with a minimum charge equivalent to the residential sewer service charge for a property with a 20mm service.

The non-residential sewer service charge for a property with a 20mm water service in 2005/06 shall be set at the current charge plus CPI % change plus 5%. This is to be maintained in real terms in future years.

Water Meter Size	Sewer Service Charge Meter Size Multiplier
20mm	1 X 20 mm charge
25mm	1.5625 X 20mm charge
32mm	2.56 X 20mm Charge
40mm	4.00 x 20mm charge
50mm	6.25 x 20mm charge
65mm	10.56 x 20mm charge
80mm	16 x 20 mm charge
100mm	25 x 20m charge
150mm	56.25 x 20mm charge
200mm	100 x 20 mm charge

8.2.3. Non Residential Sewer Usage Charge

Non-residential sewerage usage assessed for a property be the product of the metered water consumption and the Discharge Factor. The usage charge in 2005/06 shall be set at the current charge plus CPI % change plus 5%. This is to be maintained in real terms in future years.

The Discharge Factor shall be the proportion, determined by Council, of the metered water consumption of the property which approximates the volume of waste discharge to the sewers or with Council's agreement determined from direct metering. If direct metering is the method used to access the sewage volume, the property owner is responsible for all the costs associated with the metering system.

8.3. Fees & Charges

The proposed Fees and Charges for 2005/06 are attached in Appendix C. These figures are to be maintained in real terms in future years.

8.4. Drainage Service Charge

The 2005/06 Drainage Service Charge be set at \$45.00. This is to be maintained in real terms in future years. Pensioners will receive a 50% discount on drainage charges.

8.5. Trade Waste Services

The proposed Trade Waste Charges for 2005/06 are attached in Appendix D. These figures are to be maintained in real terms in future years.

8.6. Recoverable Works

The maximum amount charged for recoverable works be the direct cost plus internal overheads in accordance with the charge out rates published annually by Gosford City Council.

8.7. Developer Charges

Developer Charges be increased by CPI in accordance with the approved IPART methodology.

8.8. Exempt Properties

Approval of a fee equivalent to the water and sewerage service charges to cover the cost of servicing these properties and usage charges is sought for those exempt properties that receive or have access to services.

9. IMPACTS OF PROPOSED PRICING STRUCTURE

9.1. Water Charges

The increases in unit water charges are significant but are a direct result of the impacts of the current drought. This is possibly the most significant event of its kind experienced to date. In addition the Council is introducing revised asset management practices for existing assets. Although there is a significant increase in charges many customers should pay reduced overall water and sewerage charges as the council currently targets a 16% reduction in consumption and a probable 24% reduction over the determination period.

The Council has a need to secure additional water resources to ensure provision of water for essential domestic purposes. This requires additional capital expenditure (and resultant higher operating expenditure) to secure these additional resources. Provision of water resources through technology such as desalination is considerably more expensive than conventional surface water supplies, however is far more secure. The Council has at the same time actively pursued demand management alternatives for economic and environmental reasons.

The proposed increases in water charges are analysed in the table below for residential properties using various levels of consumption. A property with an annual consumption of 225 KL/a represents an “average” property. With the reduction in metered consumption resulting from water restrictions the appropriate comparison of bills would be to recognise a reduction to the lower consumption category. Level 3 restrictions (which are imminent with the continual fall in storages) are targeting a reduction in demand of 24% whereas the reduction in demand from 225 to 175 KL/a is 22%. In real terms the account for 2005/06 represents a reduction from that in 2003/04. Only when restrictions are eased and ultimately removed, which could be a number of years, will increases be experienced by rate payers. Prices will then potentially become a more important demand management tool.

Water Use KL per year	Average Consumption KL per year	Percent of residential customers	2003/04 Water Account (\$ 03/04)	Percent of residential customers	2005/06 Water Account (\$ 05/06)
Vacant	0	2%	71.47	1%	74.64
0 to 50	25	13%	89.72	13%	97.59
50-100	75	8%	126.22	10%	143.49
100-150	125	13%	162.72	15%	189.39
150-200	175	15%	199.22	18%	235.29
200-250	225	14%	235.72	17%	281.19
250-300	275	12%	272.22	15%	327.09
300-400	350	13%	326.97	6%	395.94
400-500	450	5%	399.97	3%	487.74
500-1000	750	4%	618.97	2%	763.14
>1000	1500	1%	1166.47	0%	1451.64

	2003/05 Average Account
	2004/05 Average Account
	2005/06 Average Account

9.2. Sewer Charges

The proposal to increase charges in real terms in the first year to enable payment of a dividend and then maintain sewer charges in real terms has minimal impact. Customers will benefit from the additional funds available to the General fund of Council.

9.3. Miscellaneous Charges

Miscellaneous charges are set to recover costs only and no "profit" component has been included. The charges represent an agreed common charge or a charge calculated using the agreed methodology.

9.4. Trade Waste Charges

The charges as proposed by Council represent those recommended by DUES and reflect the results of previous reviews of charges by IPART for Sydney Water and Hunter Water.

There will be some impact but the proposals represent industry practice.

APPENDIX A

DROUGHT MANAGEMENT BRIEFING TO PREMIER'S DEPARTMENT

Submission by Gosford City Council

September 2004

Gosford Wyong Councils Water Authority

Issue

Long term drought conditions have seen a significant decline in the town water supplies on the Central Coast. The councils are currently undertaking a range of drought management measures and preparing contingencies in the event the drought continues.

Background

- Rainfall in the Mangrove Creek Dam catchment has been below average for 9 of the last 13 years.
- Storage levels in Mangrove Creek Dam have been generally declining from a high of 73% in 1991 to a current level of 25 %.
- The scheme is configured to source significant proportions of its supplies from run of river flows with supplemental supplies being provided from Mangrove Creek Dam.
- Mangrove Creek Dam has a capacity of 190,000 ML. The catchment area of 101 KM² however is relatively small and can result in limited storage recovery. During 1998 when Sydney Water's total storage recovered from 57 % to 100% and Hunter Water's total storage recovered from 69% to 100 %, Mangrove Creek Dam storage increased from 37% to only 42 %. See attachment A.
- Over the last 12 months storage levels have declined steadily by 11.6 %. If the decline continues at this rate supplies could be exhausted around November 2006.
- Given the low storage volume and the slow recovery rate of Mangrove Creek Dam, even when the drought breaks, restrictions could be in place for a number of years and the system would also remain at risk to periods of below average rainfall.
- Restrictions have been applied as per the following:-

Restriction Level	Date Commenced	Date Ceased	Targeted reduction
1	24/2/02	17/5/04	8 %
2	17/5/04	1/8/04	16 %
2a	1/8/04	Current	16 %

- Level 3 restrictions (24 % reduction) are likely to come into effect sometime in October 2004. This will essentially prohibit external residential use other than with buckets.

Drought Management Initiatives

Initiatives related to demand reduction, emergency supplies and accessing low storage levels are being developed as drought management measures. Medium term works are also being developed to increase system yield which could also assist in drought recovery.

Demand reduction:

- Residential refit program.
- Non residential water audits.
- Installation of water efficient appliances at council premises.
- Effluent reuse for irrigation, road construction etc.
- Enhanced leakage detection and repair program.
- Rainwater tank rebates.

- Groundwater for non potable uses.
- Preparing pre-construction activities for effluent reuse at Vales Point Power station.
- DCP 100 and DCP 165 - includes water efficiency for new development.
- Restrictions and community involvement.

Emergency Supplies

- Supply of 3.6 ML/d is currently being provided by the Hunter Water Corporation. Agreement recently made to upgrade transfer system to enable supply of 6ML/day from Dec 2004. Opportunities for additional supplies are currently being investigated.
- Investigating groundwater opportunities for potable purposes and preparing necessary pre-construction activities to enable various sources to be implemented progressively.
- Investigating and preparing pre-construction activities for a desalination plant (nominally 20 ML/d capacity). Decision whether to call tenders scheduled for September 2005.

Accessing Low Storage Levels from Mangrove Creek Dam

- Constructing a temporary pump station at Mangrove Creek Dam to maintain the ability to transfer water into Boomerang Tunnel once storage levels reach 21%.
- Preparing water treatment strategy to treat low level water from Mangrove Creek Dam.

Medium Term Works

Medium term works are currently being developed involving modifications to existing infrastructure to increase system yield. These works could also assist in drought recovery.

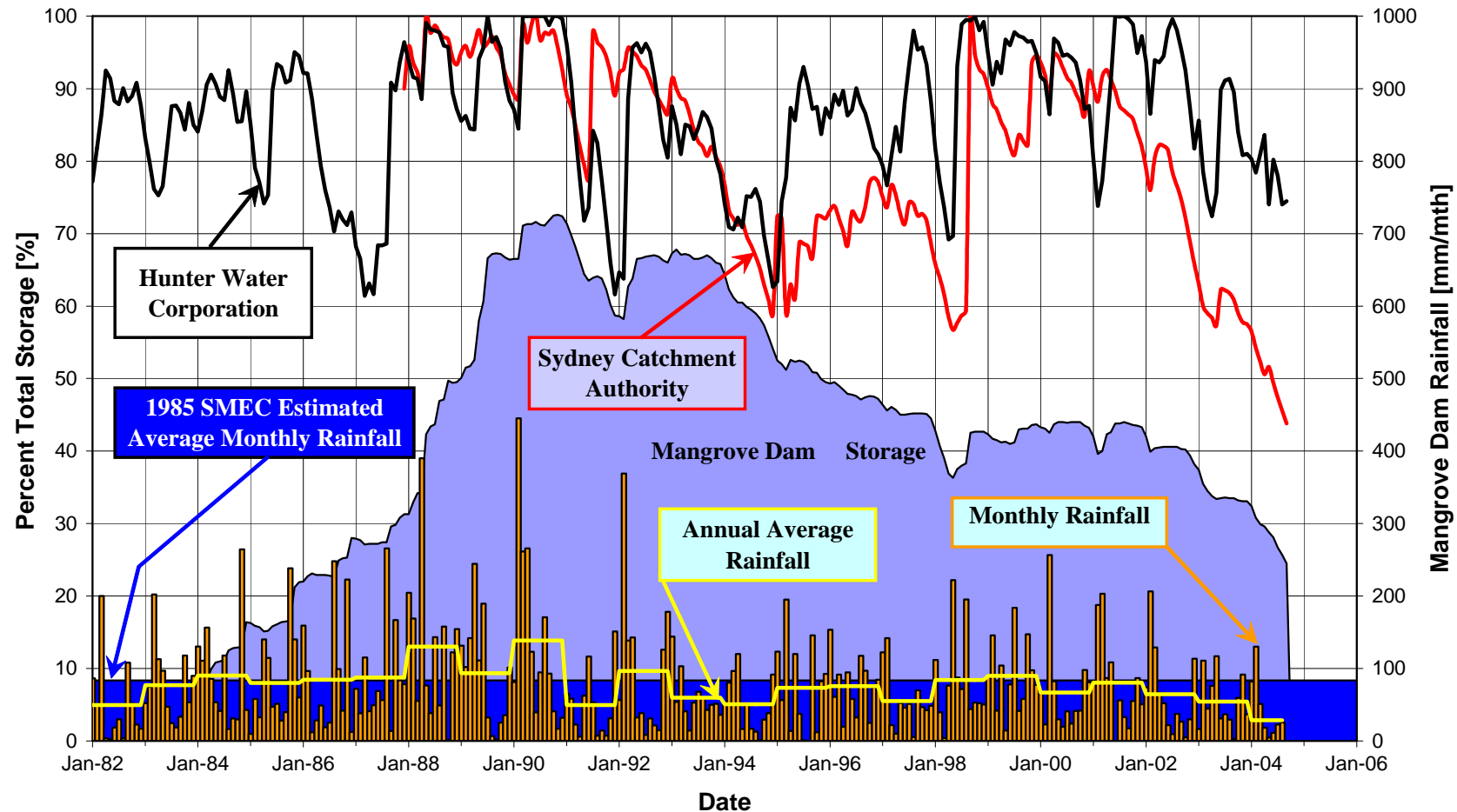
Proposed Works	Cost \$M	Decision to Proceed	Anticipated Commissioning Date	Estimated yield Improvement ML/Year
Improvements to the Lower Wyong Transfer System	5.6	Pending	April 2007	2800
Mardi High Lift Pumping Station	8.3	Pending	Oct 2006	
Improvements to Mardi Dam Transfer System	12.8	yes	Feb 2006	
Mooney Dam Transfers	4.2	Pending	April 2007	
Mardi Dam Raising	3.8	Pending	April 2007	1400

Recommendation

Relevant agencies are advised of the drought situation and assist with expediting contingency activities where required. List of proposed attendees for a briefing on the situation is provided in Attachment B.

Attachment A

Mangrove Dam Storage V's SCA & HWC Total Storage



APPENDIX B

REVIEW OF WATER CONSUMPTION FORECASTS FOR NSW METROPOLITAN WATER AGENCIES

Submission by Gosford City Council

September 2004

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SECTION 1	General Introduction
SECTION 2	Summary of Current Consumption Issues

APPENDICES

APPENDIX 1	Graph of Consumption Scenarios for Period 2005/2006 to 2009/2010
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SECTION 1

GENERAL INTRODUCTION TO REVIEW

This Review has been prepared in response to the IPART requirement that each Water Supply Authority prepare forecasts of projected water sales for the period 1 July 2005 to 30 June 2010.

The required consumption forecasts (high / medium / low) are presented in graphical form in Appendix 1 of this Review.

GENERAL INTRODUCTION TO GOSFORD CITY

Council's water supply business includes operation, maintenance and capital works activities associated with the water supply catchment, water harvesting, treatment and distribution to customers.

Major headworks components of the business such as dams, weirs, treatment plants and bulk water distribution reservoirs are shared with Wyong Shire Council and administered and overseen by the Gosford Wyong Councils' Water Authority (GWCWA) Board.

Other supply infrastructure associated with the distribution of water to customers is the responsibility of each individual Council.

Council provides water to a permanent population in excess of 160,000 via approximately 63,000 connections.

Treated water supplied is in excess of 16,000 megalitres per day with peak demands ranging from 38 megalitres per day in winter to 110 megalitres per day in summer.

As the City has had significant reserves of available land for residential and non-residential purposes sustained growth has occurred over the past decade. Growth has however slowed in the past 5 year or so. Growth is expected to continue at about 1.1% p.a. over the period of this determination.

SECTION 2

SUMMARY OF CURRENT CONSUMPTION ISSUES

In reviewing consumption and forecasting future consumption patterns / trends for Gosford several factors are highlighted;

- 1 Historic Metered Consumption
- 2 Future Metered Consumption (based solely on population growth)
- 3 Impact of Current and Future Restrictions
- 4 Unaccounted for Water (UAW)

Comments relating to each of these factors are outlined below;

1. Historical Metered Usage

Review of metered usage patterns indicates a steady growth up to and including year ending 30 June 2001 and peaking at that time. Since then and with the initiation of restrictions in February 2002 metered usage has declined as indicated in the table below.

Year Ending	Metered Consumption (ML)	Total Consumption (ML)	Unaccounted for Water* %	Smoothed metered consumption (ML) total less 14.2% UAW
June 30 1997	15,124	17,490	13.5	15,006
June 30 1998	16,428	18,426	10.8	15,810
June 30 1999	14,689	16,689	12.0	14,319
June 30 2000	15,634	16,888	7.4	14,490
June 30 2001	17,051	18,250	6.6	15,659
June 30 2002	14,583	17,289	15.6	14,834
June 30 2003	13,226	16,774	21.2	14,392
June 30 2004	12,332	16,817	26.7	14,429
			Average 14.2	

* Unaccounted for water is made up of leakage, loss through main breaks etc, and unmetered authorised use within Council parks, reserves and facilities.

These consumptions have been plotted (tagged "B") on the graph in Appendix 1.

The irregularities, on an annual basis, between total water consumption, metered water consumption and hence unaccounted for water are due to the different time at which meters are read. The total water consumption figures are a true representation, subject to meter error, of water usage during the year. Metered consumption is influenced by the meter reading cycle. Average unaccounted water is a best estimate.

Further projections of metered water consumption are therefore based on projected total water consumption less 14.2% for unaccounted for water.

2. Future Metered Usage (based solely on population growth)

Consumption forecasts based on an unrestricted demand regime have been projected. This takes into account past unrestricted usage and future population growth rate projections. The future population projections are based on Council Strategic Planning data that indicates the following:

- * a projected average 1.3% pa average population increase from 2001 to 2006
- * a projected average 1.1% pa average population increase from 2005 to 2010

The following table summarises estimated population and unrestricted demand. The reference point is June 30 2002 being the last year of unrestricted water usage.

Year Ending	Estimated Population Growth Rate (%)	Unrestricted Annual Demand (ML)	Metered Unrestricted Annual Demand (ML)**
June 30 2002	1.3	17,289	14,834
June 30 2003	1.3	17,514	15,027
June 30 2004	1.3	17,741	15,222
June 30 2005	1.1	17,937	15,390
June 30 2006	1.1	18,134	15,559
June 30 2007	1.1	18,333	15,730
June 30 2008	1.1	18,535	15,903
June 30 2009	1.1	18,739	16,078
June 30 2010	1.1	18,945	16,255

** Allows 14.2% for Unaccounted for Water.

3. Current and Future Restrictions

Restriction regimes adopted by the GWCWA provide for the following target reductions in water consumption.

Restriction Level	Target Demand Reduction %
NIL	0
1	8
2/2A	16
3	24
4	32
5	38

Level 1 restrictions were implemented on February 24 2002. Level 2 and 2A restrictions commenced on May 17 and August 1 2004 respectively.

In response to the IPART requirement for the Water Authorities to present high, medium and low consumption forecasts the following scenarios are provided;

1. High (Worst Case) Restriction Regime – Continuation of Drought for a further 3 years and then gradually return to normal.

The High Restriction scenario provides for progressive imposition of higher restriction levels (down to Level 5) until the introduction of a contingency input of 20 ML/d by December 2007. Restrictions are then maintained until June 2009 and then reduced to level 4 restrictions until June 2010.

2. Medium Restriction Regime – Weather patterns gradually return to normal over the next 3 years.

The Medium Restriction scenario provides for Level 2A restrictions maintained until December 2004 with Level 3 restrictions imposed until a contingency input of 20 ML/d is available by December 2007. Restrictions are then reduced to Level 2A until July 2009 with Level 1 restrictions held for a further 2 years.

3. Low Restriction Regime – Wet weather patterns commence in Autumn 2005.

The Low Restriction scenario is based on maintenance of Level 2A restrictions until July 2006 with Level 1 restrictions held until July 2008 and no restrictions thereafter.

It should be noted that the restriction levels outlined above represent water savings achieved by all means ie restriction conditions, water saving initiatives etc.

Gosford Council will be using the “Medium” case as the basis of its’ submission.

The following 3 tables detail projected metered water consumption under high, medium and low restriction regimes.

Appendix 1 provides a graphical representation of the 3 scenarios.

High (Worst Case) Restriction Regime

TABLE 1

Year Ending	Existing / Anticipated Restriction Regime	Metered Unrestricted Annual Demand (ML)	Metered Unrestricted Annual Demand with nominated restrictions applied (ML)
June 30 2002	Unrestricted then Level 1 restricted from February 24 2002	14,834	14,834
June 30 2003	Level 1 Restrictions from 1 July 2002 to 30 June 2003	15,027	13,825
June 30 2004	Level 1 Restrictions to May 17 2004 Level 2 Restrictions from May 18 to June 30 2004	15,222	13,862
June 30 2005	Level 2 Restrictions from July 1 to August 1 2004. Level 2A Restrictions from August 2 to September 30 2004. Level 3 Restrictions from October 1 2004 to June 30 2005.	15,390	12,004
June 30 2006	Level 3 Restrictions from July 1 2005 to September 30 2005. Level 4 Restrictions from October 1 2005 to June 30 2006.	15,559	10,891
June 30 2007	Level 4 Restrictions from July 1 2006 to June 30 2007	15,730	10,696
June 30 2008	Level 4 Restrictions from July 1 2007 to September 30 2007. Level 5 Restrictions from October 1 2007 to December 31 2007 Contingency input (20MI/d) available in December 2007. Level 5 Restrictions from January 1 2008 to June 30 2008.	15,903	10098
June 30 2009	Level 5 Restrictions from July 1 2008 to June 30 2009	16,078	9,968
June 30 2010	Level 4 Restrictions from July 1 2009 to June 30 2010.	16,225	11,053

Medium Restriction Regime
TABLE 2

Year Ending	Existing / Anticipated Restriction Regime	Metered Unrestricted Annual Demand (ML)	Metered Unrestricted Annual Demand with nominated restrictions applied (ML)
June 30 2002	Unrestricted then Level 1 restricted from February 24 2002	14,834	14,834
June 30 2003	Level 1 Restrictions from 1 July 2002 to 30 June 2003	15,027	13,825
June 30 2004	Level 1 Restrictions to May 17 2004 Level 2 Restrictions from May 18 to June 30 2004	15,222	13,862
June 30 2005	Level 2 Restrictions from July 1 to August 1 2004. Level 2A Restrictions from August 2 to December 31 2004. Level 3 Restrictions from January 1 2005 to June 30 2005	15,390	12,312
June 30 2006	Level 3 Restrictions from July 1 2005 to June 30 2006.	15,559	11,825
June 30 2007	Level 3 Restrictions from July 1 2006 to June 30 2007	15,730	11,955
June 30 2008	Level 3 Restrictions from July 1 2007 to December 31 2007. Contingency input (20MI/d) available in December 2007. Level 2A Restrictions from January 1 2008 to June 30 2008.	15,903	12,722
June 30 2009	Level 2A Restrictions from July 1 2008 to June 30 2009.	16,078	13,506
June 30 2010	Level 1 Restrictions from July 1 2009 to June 30 2010	16,225	14,954

Low Restriction Regime

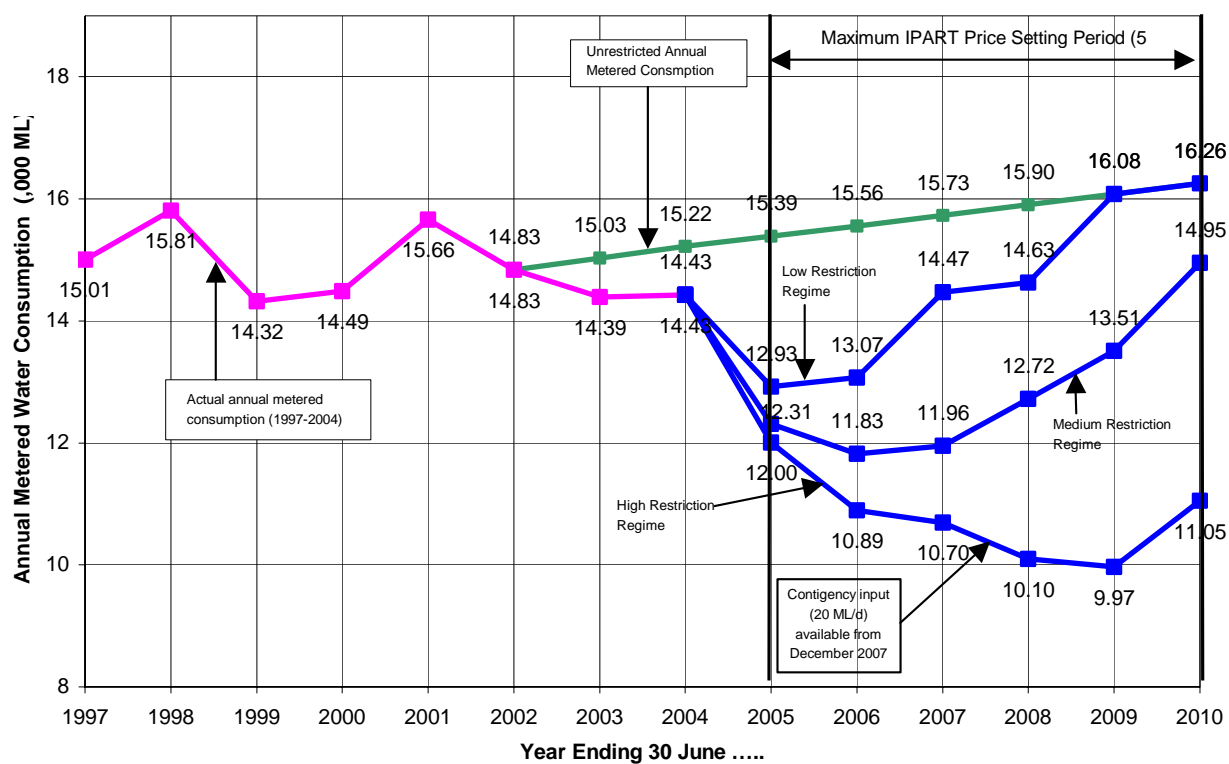
TABLE 3

Year Ending	Existing / Anticipated Restriction Regime	Metered Unrestricted Annual Demand (ML)	Metered Unrestricted Annual Demand with nominated restrictions applied (ML)
June 30 2002	Unrestricted then Level 1 restricted from February 24 2002	14,834	14,834
June 30 2003	Level 1 Restrictions from 1 July 2002 to 30 June 2003	15,027	13,825
June 30 2004	Level 1 Restrictions to May 17 2004 Level 2 Restrictions from May 18 to June 30 2004	15,222	13,862
June 30 2005	Level 2 Restrictions from July 1 to August 1 2004. Level 2A Restrictions from August 2 to June 30 2005.	15,390	12,927
June 30 2006	Level 2A Restrictions from July 1 2005 to June 30 2006.	15,559	13,069
June 30 2007	Level 1 Restrictions from July 1 2006 to June 30 2007.	15,730	14,472
June 30 2008	Level 1 Restrictions from July 1 2007 to June 30 2008.	15,903	14,631
June 30 2009	No Restrictions	16,078	16,078
June 30 2010	No Restrictions	16,225	16,255

GOSFORD CITY

Appendix 1

Metered Water Consumption Scenarios (1/7/05 - 30/6/10)



APPENDIX C

MISCELLANEOUS CHARGES From 1st July 2005

Submission by Gosford City Council

September 2004

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1. INTRODUCTION

IPART approved maximum charges for various monopoly Miscellaneous Charges in the May 2003 Determination. The range of charges and the amount of the charge have been reviewed. The charges are applied in many forms including application fees, inspection fees, registration fees etc.

This submission forms Appendix C of the Medium Term Pricing Submission to IPART for prices from 1st July 2005.

2. METHODOLOGY

Background

In 1996 Gosford Council participated in the Water Miscellaneous Charges Working Group (WMCWG) convened by IPART. The WMCWG examined a common pricing methodology to gain consistency across the four metropolitan authorities for miscellaneous pricing. Further the group endeavoured to develop a list of common services and a corresponding list of common charges.

One outcome of the Group was the adoption of the following pricing methodology:

$$\text{Miscellaneous Charge} = \left(\begin{array}{l} \text{Direct cost of labour + oncost} \\ + \text{transport + equipment} \end{array} \right) \times \begin{array}{l} \text{business} \\ \text{overhead} \end{array}$$

+ Direct material costs
+ Profit (if considered appropriate)

An agreed set of common services was developed for seventeen services with an agreed common charge for three of these services. The difficulty in achieving a complete set of common charges for all services include:

- different services being offered
- different levels of service offered for similar services

In June 2002, the WMCWG was reformed to identify common service categories for the 2003 Metro Water Determination. An agreed set of 20 common services were identified and are listed as such in this submission.

Gosford Council's Methodology

Council has generally adopted the approach of full cost recovery of the service in accordance with the agreed formula used in the 2000 & 2003 submissions. It is not considered appropriate for Council to adopt a profit component at this stage and therefore no profit has been included.

Council has waived or reduced the calculated charge where it is considered the waiving or reduction of the charge would provide a benefit to the customer or Council.

Where considered applicable, Council has adopted the Possible Common Charge or a similar charge to the other agencies for a common service.

Only monopoly charges have been included in the submission.

3. PROPOSED MISCELLANEOUS CHARGES

The proposed charges including description, summary of service provide, frequency, previous charge and proposed cost justification.

The business overhead of 50% adopted for the calculations was based on the overhead determined by Halcrow Pacific Pty. Ltd. in the NSW Water Agencies Review.

Service: Provision of Service Location Diagrams (Water and Sewer Location Plans)

<i>Common Service:</i>	<i>Agreed common service No. 3</i>
<i>Monopoly Service:</i>	<i>Yes</i>
<i>Frequency:</i>	<i>1700 Per Annum</i>
<i>Current Fee:</i>	<i>\$ 15.00 for A4 and A3 copy per sheet</i>

Narrative:

Council establishes information required regarding water and sewer locations, search records and provides a plan and any required long sections. Most property requests require three copies (ie: one sewer main copy, one water main copy and at least one long section copy). Plans covering larger areas and with more than two long sections will incur additional fees. This is an agreed common service, with two options for purchase being over the counter (hardcopy) and electronic copies. At present this service is not available electronically.

Outline of Service:

- ❖ Establish information required
- ❖ Search for records
- ❖ Provide A4 or A3 copy of plan including any long sections required and available
- ❖ Maintain records and equipment
- ❖ Dispatch of plan by post or facsimile if required

Fee Justification:

❖ Take query, locate, photocopy plan and receipt	8 min per sheet @ \$29/hr
❖ Paper and photocopying cost	\$1.00
❖ Postage or facsimile costs	\$1.00
❖ Business Overhead	50%

Calculated fee: ***\$7.80 per plan (at present sewer main, water main and long sections are on separate plans). Fee aligned to Common Fee in February 2000***

<i>Over the Counter Common fee:</i>	<i>\$15 per plan</i>
<i>Over the Counter Proposed fee:</i>	<i>\$15 per plan</i>
<i>Electronic Copies:</i>	<i>Not Available</i>
<i>Estimated income per annum:</i>	<i>\$25,500</i>

Service: Cancellation Fee – Water and Sewerage Applications

Common Service: No

Monopoly Service: Yes

Frequency: 50 Per Annum

Current Fee: \$50.00

Narrative:

Where application for services are cancelled by the applicant a request is made on Council to refund water and sewer application fees. This fee is also charged due to double paying of an application fee, where the process has been initiated twice due to the double payment.

If the application was lodged on incorrect advice from Council no cancellation fee to apply. (Statutory cancellation fee to apply where applicable and current development application fee refund procedures to remain).

Outline of Service:

- ❖ Processing of original request
- ❖ Receipting of original request
- ❖ Receive request for refund
- ❖ Check payment details and prepare refund voucher, circulate copies to relevant areas
- ❖ Prepare and process cheque refund

Fee Justification:

- | | |
|--|------------------|
| ❖ Update of database and checking for payment | 20 min @ \$29/hr |
| ❖ Prepare letter for refund and prepare cheque | 20 min @ \$29/hr |
| ❖ Postage or facsimile costs | \$1.00 |
| ❖ Business Overhead | 50% |
| ❖ Initial Administration Works completed | \$39.00 |

Calculated fee: \$69.00

Proposed fee: \$50 (*Fee to align to corporate charge for refunding application charges*)

Estimated income per annum: \$2,500

Service: Issue of Conveyancing Certificate (Section 41 Certificate)

Common Service: ***Agreed common service No. 1***

Monopoly Service: ***Yes***

Frequency: ***6,800 Per Annum***

Current Fee: ***\$20.00***

Narrative:

Section 41 Certificates are a mandatory requirement of conveyancing. Council issue a combined Section 603 (Local Government Act 1993) and Section 41 Certificate (Water Management Act 2000) showing outstanding rates and usage charges for the purpose of sale or mortgage calculations. While Council now offers a small number of solicitors access to order certificates over the internet, the same process is followed to produce and deliver a hardcopy to the solicitor.

Outline of Service:

- ❖ Receipt of monies and request for certificates
- ❖ Review outstanding accounts
- ❖ Produce and issue certificate

Fee Justification:

- | | |
|--|------------------|
| ❖ Receipt monies | 5 min @ \$29/hr |
| ❖ Review account and produce certificate | 30 min @ \$29/hr |
| ❖ Postage and stationary costs | \$1.00 |
| ❖ Business Overhead | 50% |

Calculated fee: ***\$26.40***

Common fee: ***\$15.00 (Council Certificates include additional information to Water Authority only businesses)***

Over the Counter Proposed fee: ***\$25.00***

Electronic Copies Common fee: ***Not Available***

Estimated income per annum: ***\$170,000***

Service: Special Water Meter Readings

Common Service: ***Agreed common service No. 4***

Monopoly Service: ***Yes***

Frequency: ***750 Per Annum***

Current Fee: ***\$45.00***

Narrative:

Special meter reading requests are received from vendors and purchases of properties, as well as tenants either entering or leaving a premises. A certificate is issued showing the consumption and water usage charge up to the date of reading. The special reading requires a staff member to attend the property outside of the normal reading routes.

Outline of Service:

- ❖ Receipt of monies and request for certificates
- ❖ Staff member attends property to read meter
- ❖ Meter reading entered into Council's mainframe
- ❖ Special certificate issued showing consumption and charge applicable

Fee Justification:

- | | |
|---|--------------------|
| ❖ Receipt of money and processing of request | 10 min @ \$29/hr |
| ❖ Read meter | 40 min @ \$29/hr |
| ❖ Vehicle costs to read meter | 40 min @ \$4.85/hr |
| ❖ Update Council database and issue certificate | 15 min @ \$29/hr |
| ❖ Postage and stationary costs | \$1.00 |
| ❖ Business Overhead | 50% |

Calculated fee: ***\$53.00***

Proposed fee: ***\$53.00***

Estimated income per annum: ***\$39,750***

Service: *Meter Testing*

Common Service: *Agreed common service No. 8*

Monopoly Service: Yes

Frequency: 30 per annum

<i>Current Fee:</i>	20mm	\$150.00 plus actual courier fees
	25mm	\$150.00 plus actual courier fees
	32mm	\$320.00 plus actual courier fees
	40mm	\$320.00 plus actual courier fees
	50mm	\$320.00 plus actual courier fees
	65mm	\$320.00 plus actual courier fees
	80mm	\$320.00 plus actual courier fees

Narrative:

Where a consumer does not accept the amount of water registered to their property, they are given the opportunity to have their meter tested. The meter is removed from the property and sent to an independent agent for testing. Should the meter be found to be incorrectly recording in excess of the water passing through during testing, the full testing fee is refunded and any consumption accounts adjusted.

Outline of Service:

- ❖ Fee is paid by owner
- ❖ Meter removed and replaced
- ❖ Meter sent to test site (currently Brisbane City Council)
- ❖ Respond to applicant on receipt of test results
- ❖ Refunds processed if required

Fee Justification:

❖ Receipt monies and prepare documents	20 min @ \$29/hr
❖ Remove and replace meter	1.5 hr @ \$29/hr
❖ Vehicle costs	1.5hr @ \$8.67/hr
❖ Prepare meter and documents for courier and tester	20 min @ \$29/hr
❖ Respond in writing to applicant, informing results	20 min @ \$29/hr
❖ Testing Fee 20mm or 25mm -contract rate	\$60
❖ Testing Fee Greater than 25mm - contract rate	\$230
❖ Courier Fee-contract rate	\$15 for 20mm
❖ Business Overhead	50%
❖ Stationary, Postage or facsimile costs	\$1.00

Calculated fee: *\$121.76 plus actual courier and meter testing fees*

Proposed fee *\$134 (incl. GST) plus actual courier and meter testing fees*

Estimated income per annum: *\$6,000*

Service: Bill Search Fee

Common Service: *Agreed common service No. 5*

Monopoly Service: Yes

Frequency: 10 per Annum

Current Fee: \$15.95 (including GST) for General Fund Enquiries

Narrative:

The fee is to cover the costs of searching for and replacing lost or misplaced water notices. There is very little demand for copies of water notices.

Outline of Service:

- ❖ Fee is paid and receipted
- ❖ Account details and histories are retrieved from system, compiled and sent to customer

Fee Justification:

- | | |
|---|------------------|
| ❖ Receipt monies and issue account notice | 20 min @ \$29/hr |
| ❖ Business Overhead | 50% |
| ❖ Stationary, Postage or facsimile costs | \$1.00 |

Calculated fee: ***\$15.50***

Proposed fee: ***\$17.05 (incl. GST \$1.55)***

Estimated income per annum: ***\$145.00***

Service: Building Over or Adjacent to Sewer Advice (Building Over Sewer Main Letter)

Common Service: Agreed common service No. 6

Monopoly Service: Yes

Frequency: 25 Per Annum

Current Fee: Nil

Narrative:

Council issue on request a letter regarding a building's compliance or pipe protection provided to Council's standards where the building is near or over a Council water or sewer main.

Outline of Service:

- ❖ Establish property and asset effected
- ❖ Search WAE records to determine whether pipe protection provided to Council standard.
- ❖ Search development records related to the property if required.
- ❖ Provide letter to advise outcome of investigation
- ❖ Provide technical advice to owner / developer

Fee Justification:

- | | |
|---|------------------|
| ❖ Establish property and asset effected | 5 min @ \$34/hr |
| ❖ Search records and evaluate situation | 30 min @ \$34/hr |
| ❖ Write reply detailing conditions | 15 min @ \$34/hr |
| ❖ Postage or facsimile costs | \$1.00 |
| ❖ Business Overhead | 50% |

Calculated fee: **\$43.50**

Proposed fee: ***Nil (due to asset protection)***

Estimate income per annum: ***Nil***

Service: Sales of Building Over Sewer and Water Guidelines

Common Service: No

Monopoly Service: Yes

Frequency: 30 Per Annum

Current Fee: \$10.10 (including GST)

Narrative:

Property owners/developers must take special precautions when proposing to build a structure near or over Council sewer or water mains. The guideline booklet "Building Over or Near Council Sewer and Water Mains" outlines the various special precautions.

Outline of Service:

- ❖ Technical review of guidelines to ensure current standards are applied.
- ❖ Word processing and CAD amendments..

Fee Justification:

- | | |
|---|------------------|
| ❖ Review and update guideline as required | 40 mins @\$38/hr |
| ❖ Collate, copy and bind specification | 12 mins @\$29/hr |
| ❖ Materials | \$1 |
| ❖ Business overheads | 50% |

Calculated fee: ***\$47 per volume***

Proposed fee: ***\$10.10 including GST (due to asset protection)***

Estimate income per annum: ***\$300***

Service: Section 307 Certificate

Common Service: No

Monopoly Service: Yes

Frequency: 308 Per Annum

<i>Current Fee:</i>	Dual Occupancies,	\$80.00
	Commercial Buildings, Factories, Torrens Subdivision of Dual Occupancy etc	\$120.00
	Boundary Realign with Conditions	\$200.00
	Subdivisions	\$590.00
	Development without Requirement Fee	\$45.00

Narrative:

Developers are to obtain a Section 26 Certificate which states that the development complies with the Water Management Act 2000.

Outline of Service:

- ❖ Establish location of development in relation to existing water and sewer mains
- ❖ Determine whether requirements are to be set
- ❖ Review development impact on water and sewerage systems
- ❖ Determine requirements for development
- ❖ Provide requirements letter to applicant
- ❖ Monitor compliance with the requirements
- ❖ Liaise with developer
- ❖ Provide technical support
- ❖ Receipt money

Additional services for subdivisions and other developments including mains extensions:

- ❖ Review and approve developer plans
- ❖ Additional technical support
- ❖ Review and approve Work-as-Executed records

Fee Justification: Dual occupancies

❖ Clerical – filing, typing, receipting	1 hr @ \$29/hr
❖ Technical evaluation	0.75 hr @ \$38/hr
❖ Postage or facsimile costs	\$1.00
❖ Business Overhead	50%

Calculated fee: \$87.25

Proposed fee: **\$87.00**

Fee justification: Commercial buildings, factories and torrens subdivision of dual occupancies

❖ Clerical – filing, typing, receipting	1hr @ \$29/hr
❖ Technical evaluation	1.5hr @ \$38/hr
❖ Postage or facsimile costs	\$1.00
❖ Business overhead	50%

Calculated fee: **\$130**

Proposed fee: **\$130**

Fee justification: Boundary re-alignments without mains extensions

❖ Clerical – filing, typing, receipting	1 hr @ \$29/hr
❖ Technical evaluation & support	2.5 hrs @ \$38/hr
❖ Linen release	0.5 hr @ \$34/hr
❖ Postage or facsimile costs	\$1.00
❖ Business Overhead	50%

Calculated fee: **\$212.50**

Proposed fee: **\$212.00**

Fee justification: Subdivisions, developments involving main extensions:

❖ Clerical – filing, typing, receipting	2 hrs @ \$29/hr
❖ Technical evaluation and support including plan and WAE record approval	8 hrs @ \$38/hr
❖ Adjustments to Authorities records	2 hrs @ \$29/hr
❖ Postage or facsimile costs	\$1.00
❖ Business Overhead	50%

Calculated fee: **\$631**

Proposed fee: **\$631**

Fee justification: Developments Without Requirements

❖ Clerical – filing, typing	30 mins @ \$29/hr
❖ Technical evaluation	30 mins @ \$38/hr
❖ Postage or facsimile costs	\$1.00
❖ Business overhead	50%

Calculated fee: **\$51.25**

Proposed fee: \$51.00

Estimated Income per Annum

<i>Dual Occupancies</i>	80 @ \$87	=	\$ 6,960
<i>Commercial buildings, factories & torrens subdivision of dual occupancies</i>	40 @ \$130	=	\$5,200
<i>Boundary realignments without mains extension</i>	20 @ \$212	=	\$4,240
<i>Subdivisions & developments involving mains extensions</i>	52 @ \$631	=	\$32,812
<i>Developments without requirements</i>	58 @ \$51	=	<u>\$2,958</u>
			\$52,170

Service: Inspection of Concrete Encasement and Additional Junction Cut-ins

Common Service: No

Monopoly Service: Yes

Frequency: 60 Per Annum

<i>Current Fee:</i>	Inspection of concrete encasement	\$135
	Additional inspection	\$45
	Inspection of concrete encasement greater than 10m	\$135 plus \$10 per metre

Narrative:

Private developers maybe required to concrete encase sewer mains and provide additional sewer junctions. Council inspect the works to determine that works are in accordance with Council standards.

Outline of Service:

- ❖ Provide technical advice on Council standards and procedures
- ❖ Inspect site for compliance with Council standards
- ❖ Measure and record amendments
- ❖ Incorporate amendments in Council's Work-as-Executed records for concrete encasement and additional junction cut-ins (inspections up to 10m determined)

Fee Justification: Two site inspections required as a minimum requirement

- | | |
|--------------------------------------|-----------------|
| ❖ Two site inspections | 2 hrs @ \$29/hr |
| ❖ Transport costs | 2 hrs @ 4.85/hr |
| ❖ Adjustments to Authorities records | 1 hr @ \$29/hr |
| ❖ Business Overhead | 50% |

Calculated fee: \$140.20

Proposed fee: \$140

Fee Justification: Inspections of encasements greater than 10m.

- | | |
|---|---------------|
| ❖ service as per inspections up to 10m | \$140 |
| ❖ additional inspections at an average of \$145 divided by 10 ie. | \$14per metre |

Calculated fee: \$140 plus \$14per metre over 10m

Proposed fee: \$140 plus \$14per metre over 10 metres of encasement

Fee Justification: Additional Inspection due to non-compliance

❖ Site inspection	1 hrs @ \$29/hr
❖ Transport costs	1 hrs @ 4.85/hr
❖ Business Overhead	50%

Calculated fee: \$48.35

Proposed fee: \$48

9.4.1. Estimated income per annum

❖ <i>Concrete encasement/junction cut-ins</i>	<i>30 @ \$140 = \$4,350</i>
❖ <i>Additional inspections</i>	<i>10 @ \$48 = \$ 480</i>
❖ <i>Concrete encasements greater than 10m</i>	<i>2 @ \$350 = \$ 700</i>

Service: Sale of Specification for Construction of Water and Sewerage Works by Private Contractors

Common Service: No

Monopoly Service: Yes

Frequency: 15 per Annum

Current Fee: \$71.50 (incl GST) per volume - total of two volumes

Narrative:

Contractors carrying out private works are required to purchase Council's "Specifications for Construction of Water and Sewerage Works by Private Contractors". Volume one contains specifications for construction standards. Volume two contains standard schedules to the specification.

Outline of Service:

- ❖ Technical review of specification to ensure current standards are applied.
- ❖ Word processing and CAD amendments to specification.
- ❖ Maintain distribution list.

Fee Justification:

- | | |
|---|--|
| ❖ Review and update specification as required | 30 hrs @ \$36/hr |
| ❖ Collate, copy and bind specification | 8 hrs @ \$29/hr |
| ❖ Maintain distribution records | 1hr @ \$36/hr |
| ❖ Materials | \$100 |
| ❖ Business overheads | 50% |
|
 | |
| ❖ <i>Calculated fee:</i> | <i>\$70.73 per volume ie. $\frac{\text{Total annual cost}}{15 \text{ copies} \times 2 \text{ volumes}}$</i> |
|
 | |
| ❖ <i>Proposed fee:</i> | <i>\$78 per volume (including GST)</i> |

Estimated income per annum: \$2,130

Service: Major and Minor Works Inspection

Common Service: *Agreed common service No. 19*

Monopoly Service: Yes

Frequency: Development Driven

<i>Current Fee:</i>	Private Works Inspection Water	\$5.50/metre
	Private Works Inspection Sewer	\$7.00/metre
	Re-inspection fee	\$100.00

Narrative:

Council inspect water and sewer works carried out by private developers for compliance with Council's standards. Should the works not comply with Council standards, a re-inspection is required. A common service for major works inspections has been identified for inspections of mains longer than 25 metres and/or greater than 2 metres in depth. Council does not differentiate in price for major or minor works inspections.

Outline of Service:

- ❖ Review private developers plans
- ❖ Carry out routine inspections during construction
- ❖ Carry out acceptance test
- ❖ Carry out final inspection
- ❖ Provide technical assistance
- ❖ Chlorinate main

Fee Justification: Sewer Main Inspections

- | | |
|--------------------------------------|----------------------|
| ❖ Routine inspection of main / meter | 5 min/m @ \$38/hr |
| ❖ Acceptance Test | 2.75 min/m @ \$38/hr |
| ❖ Final Inspection | 1.25 min/m @ \$38/hr |
| ❖ Vehicle rate | 9 min/m @ \$4.85/hr |
| ❖ Business Overhead | 50% |

Calculated fee: ***\$9.28 per metre***

Proposed fee: ***\$9.00 per metre with minimum of \$140 (being fee for supervision of a junction cut-in)***

Fee Justification: Water Main Inspections

- | | |
|--------------------------------------|------------------------|
| ❖ Routine inspection of main / meter | 4 min/m @ \$38/hr |
| ❖ Acceptance Test | 2.5 min/m @ \$38/hr |
| ❖ Final Inspection | 1.25 min/m @ \$38/hr |
| ❖ Chlorination of main | 1 min/m @ \$38/hr |
| ❖ Vehicle rate | 8.75 min/m @ \$4.85/hr |
| ❖ Business Overhead | 50% |

Calculated fee: *\$8.32 per metre*

Proposed fee: *\$8.00 per metre with minimum of \$140 (being fee for supervision of junction cut-in)*

Estimated income per annum:

<i>Water mains</i>	<i>2500m @ \$8.00 = \$20,000</i>
<i>Sewer mains</i>	<i>4000m @ \$9.00 = <u>\$36,000</u></i>
	<i>Total = \$56,000</i>

Fee Justification: Re-Inspection Fee

❖ Re-inspection per visit	1.75 hrs @ \$38/hr
❖ Vehicle rate	1.75 hrs @ \$4.85/hr
❖ Business Overhead	50%

Calculated fee: *\$108.25*

Proposed fee: *\$ 108*

Estimated income per annum: *10 @ \$108 = \$1,080*

Service: Private Developers Plan Resubmission

Common Service: No

Monopoly Service: Yes

Frequency: 10 Per Annum

Current Fee: \$50 for first hour and \$30 for each hour thereafter.

Narrative:

Council review and approve developers request for changes to previously approved water or sewer plans.

Outline of Service:

- ❖ Review proposed changes for compliance
- ❖ Provide technical support
- ❖ Re-issue approval letter if required

Fee Justification:

- | | |
|---------------------------|------------------|
| ❖ Provide technical input | 30 min @ \$38/hr |
| ❖ Clerical | 30 min @ \$38/hr |
| ❖ Postage | \$1 |
| ❖ Business Overhead | 50% |

Time to review varies on the extent and size of works amended. A minimum of \$50 for the first hour and then \$30 for each hour thereafter.

Calculated fee: \$58.00 (*minimum for first hour*)

Proposed fee: \$58 for first hour and \$30 for each hour thereafter.

Estimated income per annum: \$580

Service: Approval of Developers Sewer Pump Station Rising Main Design

Common Service: No

Monopoly Service: Yes

Frequency: 2 per Annum

Current Fee: \$210

Narrative:

Council reviews and approves private developers proposals for provision of sewer; pump stations/rising mains for assessment of:

- i) suitability for integration within the existing sewerage system.
- ii) proposed works conform to both industry and Council standards.

Outline of Service:

- ❖ Confer with owners representative on design standards/site specific issues
- ❖ Review technical data, design criteria and design plans. Identify required amendments.
- ❖ Review, condition, approve final design plans

Fee Justification:

- ❖ Preliminary discussion re design standards/site specific requirements 2 hrs @ \$38/hr
- ❖ Review final design plans, preparation of letter of conditions 1.5 hrs @ \$38/hr
- ❖ Clerical – filing, typing etc. 30 min @ \$29/hr
- ❖ Business Overhead 50%

Calculated fee: \$221.25

Proposed fee: \$220

Estimated income per annum: \$440

Service: Approval of Private Internal Residential Sewer Pump Station Rising Main Design

Common Service: No

Monopoly Service: Yes

Frequency: 2 per Annum

Current Fee: \$80

Narrative:

Council reviews property owners proposals for provision of minor internal sewer; pump stations/rising mains for assessment of:

- iii) suitability for integration within the existing sewerage system.
- iv) proposed works conform to both industry and Council standards.

Outline of Service:

- ❖ Confer with owners representative on design standards/site specific issues
- ❖ Review technical data, design criteria and design plans. Identify required amendments.
- ❖ Review, condition, approve final design plans

Fee Justification:

- ❖ Preliminary discussion re design standards/site specific requirements 45 min @ \$38/hr
- ❖ Review final design plans, preparation of letter of conditions 30 min @ \$38/hr
- ❖ Clerical – filing, typing etc. 20 min @ \$29/hr
- ❖ Business Overhead 50%

Calculated fee: \$85.75

Proposed fee: \$85

Estimated income per annum: \$170

Service: Approval of Extension of Sewer/Water Mains to Properties Outside Service Areas

Common Service: No

Monopoly Service: Yes

Frequency: 5 Per Annum

Current Fee: \$100

Narrative:

In addition to subdivisions and site redevelopments, water/sewer main extensions can result from requests by property owners for connection of unserved properties. Generally, these properties were created when water and sewer facilities were not available in the area but as a consequence of ongoing developments, water and/or sewer facilities have been progressively constructed to the point where it is financially viable to connect. The process is the same as that for subdivisions and redevelopments, being the requirement to pay a developer charge and construct works, generally being for one property only with one residence connecting to either the water or sewer system.

Outline of Service:

- ❖ Request for conditions of connection received by letter or fax.
- ❖ Applicants proposal assessed and system capabilities reviewed
- ❖ Prepare and issue letters of conditions
- ❖ Review/condition/approve design plans (if required)

Fee Justification:

- | | |
|--|------------------|
| ❖ Review applicants request and investigate systems capabilities | 45 min @ \$29/hr |
| ❖ Prepare and issue letter of conditions | 30 min @ \$29/hr |
| ❖ Review design plans and issue construction requirements | 45 min @ \$38/hr |
| ❖ Clerical – filing | 30 min @ \$29/hr |
| ❖ Business Overhead | 50% |

Calculated fee: \$118.88

Proposed fee: \$120

Estimated income per annum: \$600

Service: Sale of Sewer Plan Books

Common Service: No

Monopoly Service: Yes

Frequency: 3 CD's per annum

<i>Current Fee:</i>	A3 Sheets in cardboard folder	\$380
	A3 Sheets in plastic pockets (3 folders)	\$495
	Annual charge for monthly updating service	\$265

Narrative:

- ❖ Council produce and sell a CD set of sewer reticulation plans.

Outline of Service:

- ❖ Copy sewer reticulation plans in electronic format.

Fee Justification:

- | | |
|---------------------|-----------------|
| ❖ Plan preparation | 1 hrs @ \$29/hr |
| ❖ Materials | \$20 |
| ❖ Business Overhead | 50% |

Calculated fee: \$63.50

Proposed fee: \$65

Estimated income per annum:

Sale of sewer plan CD's 3 @ \$65 = \$195.00

Service: Statement of Available Pressure Flow

Common Service: ***Agreed common service No. 20***

Monopoly Service: Yes

Frequency: 40 per Annum

Current Fee: \$100

Narrative:

Council provides information regarding the available water pressure in the Council's water mains at a given location for fire flow demands required for design purposes by a developer. This is carried out utilising Council's Plans, the GIS and Hydraulic model.

Outline of Service:

- ❖ Establish information required
- ❖ Locate exact location of the property
- ❖ Establish the water main which will service the property
- ❖ Determine the reduced level (RL) of the property
- ❖ Enter data into the hydraulic model, run and record the information
- ❖ Type up and record information
- ❖ Dispatch and file information

Fee Justification:

- | | |
|---|-------------------|
| ❖ Take query, locate and use data collected to provide the information required | 1.75 hr @ \$38/hr |
| ❖ Type up information, send and file information | 0.25 hr @ \$29/hr |
| ❖ Paper and photocopying cost | \$1.00 |
| ❖ Business Overhead | 50% |
| ❖ Postage or facsimile costs | \$1.00 |

Calculated fee: ***\$112.62***

Proposed fee: ***\$110***

Estimated income per annum: ***\$4,400***

Service: Backflow Prevention Application and Registration

Common Service: *Agreed common service No. 17*

Monopoly Service: Yes

Frequency: 100 Per Annum

Current Fee: \$55.00 (including GST)

Narrative:

Register of Backflow Prevention devices is required under AS3500.

Outline of Service:

- ❖ Receive application for registration of Backflow Prevention Device
- ❖ Inspector to inspect, review and audit device
- ❖ Database of registered devices is kept and updated annually

Fee Justification:

- | | |
|--|------------------|
| ❖ Receipt monies and process application | 10 min @ \$29/hr |
| ❖ Inspection and testing of device | 1 hr @ \$38/hr |
| ❖ Vehicle costs | 1 hr @ \$4.85/hr |
| ❖ Process information into database | 10 min @ \$29/hr |
| ❖ Business Overhead | 50% |

Calculated fee: ***\$76.35***

Proposed fee: ***\$60.00 including GST***

Estimated income per annum: ***\$5,500***

Service: Backflow Prevention Registration Renewal

Common Service: ***Agreed common service No.18***

Monopoly Service: ***Yes***

Frequency: ***1000 Per Annum***

Current Fee: ***\$22.00***

Narrative:

Annual audit of all Backflow Prevention devices are required under AS 3500. Inspectors receive results of tests performed by accredited plumbers. A review and audit of the results is undertaken. Random audits of the tests received from licensed plumbers are undertaken by Council plumbing inspectors. Complying systems are then re-registered, with the information entered into Council's database.

Outline of Service:

- ❖ Inspectors to review and audit test results
- ❖ Information entered into Council's register

Fee Justification:

- | | |
|--------------------------------------|------------------|
| ❖ Review and audit of test results | 15 min @ \$38/hr |
| ❖ Test results entered into database | 15 min @ \$29/hr |
| ❖ Letter of compliance issued | 15 min @ \$29/hr |
| ❖ Postage and Stationary | \$1.00 |
| ❖ Business Overhead | 50% |

Calculated fee: ***\$37.00***

Proposed fee: ***\$25.00 including GST***

Estimated income per annum: ***\$25,000***

Service: Trade Waste Approvals

Common Service: No

Monopoly Service: Yes

Frequency: 100 Per Annum

Current Fee: Nil

Narrative:

As a result of applications for Commercial or industrial Development Approvals, the applicant is required to obtain approval for discharge into Council's sewers. Council inspect the property and issue approval where compliant. The approval is current for 3 years, in which time the properties are inspected twice annually for compliance.

Outline of Service:

- ❖ Inspectors receive and review application
- ❖ Site inspection is required
- ❖ Approval notice is prepared
- ❖ Information entered into Council's register
- ❖ Two site inspection per annum

Fee Justification:

- | | |
|--|------------------|
| ❖ Review application, inspect site, prepare and issue approval | 1 hr @ \$38/hr |
| ❖ 2 inspections per year for three years (30 min each inspect) | 3 hr @ \$38/hr |
| ❖ Vehicle costs (for all inspections) | 4 hr @ \$4.85/hr |
| ❖ Business Overhead | 50% |

Calculated fee: **\$247.40**

Proposed fee: **\$160.00 Application**

Estimated income per annum: **\$16,000**

Service: Property Sewerage Diagram

Common Service: *Agreed common service No. 2*

Monopoly Service: Yes

Frequency: 5,500 Per Annum

Current Fee: \$15.00 Non Certified Copy
\$15.00 Certified Copy

Narrative:

Council requires that all new sewer services to properties are inspected and that plumbers return a diagrammatic representation of the house service connections and internal plumbing.

These diagrams are then imaged into Council's computer network. Diagrams are requested for conveyancing, alterations and plumbing works.

Currently these services are not available electronically.

Outline of Service:

- ❖ Payment processed
- ❖ Check details of property in database
- ❖ Search for diagram on computer
- ❖ Print diagram
- ❖ If for conveyancing, or via fax, type and issue letter

Fee Justification:

- | | |
|--|------------------|
| ❖ Maintain records | 30 min @ \$29/hr |
| ❖ Receive request, search and retrieve diagram | 10 min @ \$29/hr |
| ❖ Type letter | 10 min @ \$29/hr |
| ❖ Stationary, facsimile and postage charges | \$1.00 |
| ❖ Business Overhead | 50% |

<i>Non Certified Copy Calculated fee:</i>	<i>\$30.00</i>
<i>Certified Copy Calculated Fee:</i>	<i>\$37.25</i>
<i>Electronic Copy:</i>	<i>Not Available</i>

<i>Non Certified Copy Proposed fee:</i>	<i>\$20.00</i>
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<i>Certified Copy Proposed fee:</i>	<i>\$25.00</i>
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<i>Estimated income per annum:</i>	<i>\$112,500</i>
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Service: Location of Water and Sewer Mains

Common Service: No

Monopoly Service: No

Frequency: 25 Per Annum

Current Fee: Actual cost with a minimum of \$165.00

Narrative:

Private developers/contractors request the on-site indication of the alignment, and often depth, of water and sewer mains and services.

Outline of Service:

- ❖ Inspect available plans/long sections of main
- ❖ Attend site to physically identify alignment of main by measurement or use of pipe locating equipment
- ❖ Determine depth of main, if required, by accessing existing fittings on mains or by excavation/probing

Fee Justification:

- ❖ Site inspection –
Crew leader, crew member and vehicle 1.5 hrs @ \$94
- ❖ Business Overhead 50%

Calculated fee: \$211.50

Proposed fee: Actual cost with a minimum of \$175

Estimated income per annum: \$5,000

Service: Annual Metered Standpipe Hire

Common Service: *Agreed common service No. 15*

Monopoly Service: Yes (metered standpipes can be used across both Gosford City and Wyong Shire)

Frequency: 25 Per Annum

Current Fee: Same as Annual Service Meter Charge for the size of the Standpipe

Narrative:

Private water carters and contractors hire metered standpipes to allow them to draw large quantities of water quickly from Council's water hydrants.

Outline of Service:

- ❖ Arrange purchase of metered standpipes from manufacturer.
- ❖ Provide hire agreement documentation to applicant.
- ❖ Receive hire fee and issue standpipe.
- ❖ Read metered water usage quarterly.
- ❖ Issue account for water usage and receive payment.
- ❖ Determine and monitor designated hydrants for use by water carters.
- ❖ Liaise with other contractors, eg. directional drilling contractors, on the appropriate hydrant for them to draw water.

Fee Justification:

Registration Charge

- ❖ The registration fee will be considered as an availability charge. Therefore the current availability charge according to the approved IPART Determination, apply for the meter size used.

Calculated fee: *N/A*

Proposed fee: *All Standpipes with a Connection less than 50mm to be charged at the 20mm service charge*

All Standpipes with a Connection equal to or greater than 50mm to be charged at the 50mm service charge

Estimated income per annum: ***\$20,000***

Service: Standpipe Hire – Security Bond

Common Service: ***Agreed common service No. 14***

Monopoly Service: Yes (metered standpipes can be used across both Gosford City and Wyong Shire)

Frequency: 25 Per Annum

Current Fee: Deposit (1 off refundable) \$596

Narrative:

Private water carters and contractors hire metered standpipes to allow them to draw large quantities of water quickly from Council's water hydrants.

Outline of Service:

- ❖ Arrange purchase of metered standpipes from manufacturer.
- ❖ Provide hire agreement documentation to applicant.
- ❖ Receive hire fee and issue standpipe.
- ❖ Read metered water usage quarterly.
- ❖ Issue account for water usage and receive payment.
- ❖ Determine and monitor designated hydrants for use by water carters.
- ❖ Liaise with other contractors, eg. directional drilling contractors, on the appropriate hydrant for them to draw water.

Calculated fee: ***N/A***

Proposed fee: ***Deposit: \$596.00***

Estimated income per annum: ***Nil – Held as Deposit only***

Service: Metered Standpipe Usage

Common Service: *Agreed common service No. 16*

Monopoly Service: Yes (metered standpipes can be used across both Gosford City and Wyong Shire)

Frequency: 25 Per Annum

Current Fee: Water usage charge \$0.755/kL

Narrative:

Private water carters and contractors hire metered standpipes to allow them to draw large quantities of water quickly from Council's water hydrants.

Outline of Service:

- ❖ Arrange purchase of metered standpipes from manufacturer.
- ❖ Provide hire agreement documentation to applicant.
- ❖ Receive hire fee and issue standpipe.
- ❖ Read metered water usage quarterly.
- ❖ Issue account for water usage and receive payment.
- ❖ Determine and monitor designated hydrants for use by water carters.
- ❖ Liaise with other contractors, eg. directional drilling contractors, on the appropriate hydrant for them to draw water.

Fee Justification:

Water Usage

- ❖ The usage charge according to the approved IPART Determination.

Calculated fee: *N/A*

Proposed fee: *As per standard water usage charges per kilolitre*

Estimated income per annum: *\$21,500*

Service: Water Service Connection (Including Application Fees for Connection or Disconnection)

Common Service: Agreed common service No. 9, 10, 11 & 12

Monopoly Service: Yes

<i>Frequency:</i>	Single dwelling residential	1,000 Per Annum
	Multi-dwelling residential/commercial	100 Per Annum

<i>Current Fee:</i>	Single dwelling residential	\$300
	Multi-dwelling/commercial	Quoted actual cost

Narrative:

Connect water services to new or redeveloped premises and upsize/downsize services to existing premises on application.

Outline of Service:

- ❖ Receive application and review the completeness of detail provided.
- ❖ Site inspection.
- ❖ Preparation of a quotation, where required.
- ❖ Liaison with applicant regarding site conditions or details on application including timing of connection.
- ❖ Send quotation to applicant.
- ❖ Receive payment.
- ❖ Install connection.
- ❖ Record details of connection for rating purposes.

Fee Justification:

- ❖ Connection fee for single dwelling residential previously established based on average connection cost for this type of service.
- ❖ Connection fee for multiple or larger service based on firm quotation of estimated actual cost.
- ❖ Business Overhead 50%

Calculated fee:

Single dwelling residential - Expenditures recorded in Council's financial costing system indicate an average connection cost of \$383 including a \$38 administration charge for 20mm services.

Multiple and larger connections should continue to be charged the estimated actual cost

Proposed Application fee for connection or disconnection of:

<i>20-25mm meter:</i>	<i>\$38.00</i>
<i>32-65mm meter:</i>	<i>\$38.00</i>
<i>80mm or greater meter:</i>	<i>\$38.00</i>
<i>Multiple and large services – estimated actual cost</i>	

Proposed Connection Fee for a 20mm Meter: \$300.00 (including application fee)

Proposed Connection Fee for Greater than 20mm: Quoted Cost of works plus application fee of \$38.00

Estimated income per annum: \$500,000

Service Sewer Connection fees

Monopoly Service: Yes

Frequency: 800 per annum

Current Fee:	New Sewer	\$170
	Plus each additional WC	\$60
	Alterations	\$110
	Plus for each additional WC	\$60
	Units/Villas (1 WC each flat or unit)	\$130
	Caravan Connection Fee	\$75
	Sewer Re-Inspection Fee	\$87

Narrative:

Developments requiring connection to, or alteration to existing connection to Council's sewer requires inspections to provide protection to Council's sewerage system.

Outline of Service:

Inspections are carried out of the following:

- ❖ Internal Drainage Line
- ❖ External Drainage Line
- ❖ Final Inspection

The changes where alternations are carried out may not involve the connection to Council's sewer. Villas, units and caravans may not require the same number of inspections for internal nor external line inspection and final connection.

Fee Justification:

New Sewer (1 WC)

- | | |
|--|-------------------|
| ❖ Minimum 3 inspections at 1 hour per inspection | 3 hrs @ \$38/hr |
| ❖ Clerical/Administration | 0.3 hrs @ \$29/hr |
| ❖ Business Overhead | 50% |

Calculated Fee (1 WC): **\$169.65**

Proposed Fee (1 WC) **\$170**

Additional WC

- | | |
|--|-------------------|
| ❖ 1 additional inspection for line and connection to internal system | 1 hr @ \$38/hr |
| ❖ Clerical/Administration | 0.2 hrs @ \$29/hr |
| ❖ Business Overhead | 50% |

Calculated Fee (Additional WC): **\$65.70**

Proposed Fee: **\$65**

Fee Justification: Alterations

❖ Minimum 2 inspections (internal and external)	2 hr @ \$38/hr
❖ Clerical/Administration	0.2 hrs @ \$29/hr
❖ Business Overhead	50%

Calculated fee: **\$122.70**

Proposed fee: **\$122**

Additional WC – as above

Fee Justification: Units, Villas

❖ 2 inspections per unit/villa (internal and external line inspections)	2 hr @ \$38/hr
❖ 1 inspection for final inspection to Council's sewer	0.25 hr @ \$38/hr
❖ Clerical/ Administration	0.3 hr @ \$29/hr
❖ Business Overhead	50%

Calculated Fee (per villa or unit): **\$141.30**

Proposed Fee **\$140**

Additional WC – as above

Fee Justification: Caravan Connection Fee:

❖ 1 inspection for external line	1 hr @ \$38/hr
❖ Portion of final inspection for connection	0.25 hr @ \$38/hr
❖ Clerical/Administration	0.25 hr @ \$29/hr
❖ Business Overhead	50%

Calculated Fee **\$82.12**

Proposed Fee **\$82**

Fee Justification: Sewer Re Inspection Fee

❖ Inspection	1hr @ \$38/hr
❖ Inspection Report completion	0.5 hr @ \$38/hr
❖ Clerical/Administration	0.2 @ \$29/hr
❖ Business Overhead	50%

Calculated Fee: **\$94.20**

Proposed Fee : **\$94**

Total estimated income per annum: **\$108,000**

Service: Water Reconnection Fee

Common Service: ***Agreed common service No. 7***

Monopoly Service: ***Yes***

Frequency: ***2 Per Annum***

Current Fee: ***\$ 30.00***

Narrative:

Where a customer's water supply is restricted or disconnected due to non-payment, Council will reconnect the service either inside or outside of normal business hours. Disconnection does not happen without dunning letters and contact being made with the property owner to try and establish a repayment option.

Outline of Service:

- ❖ Phone contact made where possible to inform customer of possible disconnection
- ❖ Staff member attends property to disconnect meter
- ❖ Details entered into Council mainframe
- ❖ Meter Reconnected upon payment of outstanding debt or agreement to repayment schedule.

Fee Justification:

- | | |
|--|-----------------|
| ❖ Re-connect meter (Business Hours) | 1hr @ \$29/hr |
| ❖ Vehicle costs | 1hr @ \$4.85/hr |
| ❖ Update Council database and receipt monies | 15 min @ 29/hr |
| ❖ Re-connect meter (Outside BH's, minimum 4 hours) | 4 hrs @ \$29/hr |
| ❖ Business Overhead | 50% |

During Business Hours Calculated fee: ***\$59.22***

Outside Business Hours Calculated fee: ***\$189.72***

<i>Proposed fee:</i>	<i>During Business Hours</i>	<i>\$50.00</i>
	<i>Outside Business Hours</i>	<i>\$100.00</i>

Estimated income per annum: ***\$60.00***

Service: Approval for Adjustment of Sewer/Water Mains

Common Service: ***Agreed common service No. 13***

Monopoly Service: ***Yes***

Frequency: ***10 Per Annum***

Current Fee: ***\$250.00***

Narrative:

Water/sewer main relocations can result from requests by developers to accommodate new buildings, other infrastructure etc.

Outline of Service:

- ❖ Request for conditions of adjustment received by letter or fax.
- ❖ Applicants proposal assessed
- ❖ Prepare and issue letters of conditions
- ❖ Review/condition/approve design plans (if required)

Fee Justification:

- | | |
|--|------------------|
| ❖ Review applicants request | 1 hr @ \$38/hr |
| ❖ Prepare and issue letter of conditions | 45 min @ \$38/hr |
| ❖ Review design plans and issue construction requirements and adjust Authority records | 3 hrs @ \$38/hr |
| ❖ Business Overhead | 50% |

Calculated fee: ***\$270.75***

Proposed fee: ***\$270***

Estimated income per annum: ***\$2,700***

APPENDIX D

TRADE WASTE CHARGES FOR 2005/6

Submission by Gosford City Council

September 2004

Category of Dischargers

In line with the Department Of Energy Utilities & Sustainability (DEUS) Model Policy and Best Practice Guidelines Gosford City Council proposes charges for the following discharger categories. These charges are to be in addition to non-residential sewer charges.

Unless stated otherwise within this document or Council's Trade Waste Policy the definitions are as contained within the New South Wales Government Guidelines for Water Supply, Sewerage and Trade Waste Pricing.

Category 1 (requiring nil or minimal pre-treatment)

Category 1 liquid trade waste dischargers are those conducting an activity deemed by Council as requiring nil or minimal pre-treatment equipment and whose effluent is well defined and of a relatively benign nature (eg. Hairdresser, food preparation or serving business not generating oily/greasy waste, retail pet shop, florist etc.).

The maximum daily discharge volume shall be 1 kilolitre per day or a flow rate of 0.7 litres per second.

Category 2 (requiring prescribed pre-treatment)

Category 2 liquid trade waste dischargers are those conducting an activity deemed by Council as requiring a prescribed type of liquid trade waste pre-treatment equipment (eg. Grease arrestor, oil/water separator etc.) and whose effluent is well characterised (vehicle washing, mechanical repairs, food preparation or serving generating oily/greasy waste etc.).

The maximum daily discharge volume shall be 10 kilolitres per day or a flow rate of 0.7 litres per second.

Category 3 (large or industrial waste dischargers)

Category 3 liquid trade waste dischargers are those conducting an activity which is of an industrial nature and/or which results in large volumes of liquid trade waste to the sewerage system (eg. abattoir, landfill, winery etc.).

The maximum daily volume shall be 10 kilolitres or greater per day or a flow rate of 0.7 litres per second.

Category 4 (Non Septic Liquid Waste Transported To Treatment Sites By Vehicles)

Special conditions of discharge shall apply for wastes of this type. The wastes shall comply with the quality standards determined by Council and the volume and quality shall be such that together no impact on the treatment process will occur.

Category 5 (Septic Liquid Waste Transported To Treatment Sites By Vehicles)

Special conditions of discharge shall apply for wastes of this type. The wastes shall comply with the quality standards determined by Council and the volume and quality shall be such that together no impact on the treatment process will occur.

***Note: Effluent waste only . Solid waste prohibited.**

Charging Structure

Category 1 Dischargers

Payment of total trade waste fees and charges as follows

$$TW1 = A + I$$

Where:- TW1 = Total annual trade waste fees and charges
 A = Annual trade waste agreement fee (\$)
 I = Re-inspection fee (\$) (where required)

Category 2 Dischargers

Payment of trade waste fees and charges as follows

$$TW2 = A + I + C \times UC_{tw} \times TWDF$$

Where:- TW2 = Total annual trade waste fees and charges
 A = Annual trade waste agreement fee (\$)
 I = Re-inspection fee (\$) (where required)
 C = Customers annual water consumption (kL)
 UC_{tw} = Trade waste usage charge (\$/kL)
 TWDF = Trade waste discharge factor

Category 3 Dischargers

Payment of trade waste fees and charges being the maximum of :-

$$TW3 = A + I + EMC$$

Where:- A = Annual trade waste agreement fee (\$)
 I = Re-inspection fee (\$) (where required)
 EMC = Total excess mass charge.

or TW2.

Trade waste usage charge

In line with the Department of Energy Utilities & Sustainability (DEUS) Best Practice Guidelines Gosford City Council proposes application of trade waste usage charge of \$1.30 / kL.

Pollutant Charge

In line with the Department of Energy Utilities & Sustainability (DEUS) Best Practice Guidelines Gosford City Council proposes application of Excess Mass Charges for non-complying liquid trade waste as per the table below. Limits for pollutants are set out in Gosford City Council Liquid Trade Waste Policy.

POLLUTANT	EXCESS MASS CHARGE/kg
Aluminium (Al)	\$0.54
Ammonia (as N)	\$1.60
Arsenic (As)	\$54.00
Barium (Ba)	\$27.00
Biological Oxygen Demand (BOD ₅)	\$1.30
Boron (B)	\$0.54
Bromine (Br ₂)	\$11.00
Cadmium (Cd)	\$250.00
Chlorinated Hydrocarbons	\$27.00
Chlorinated Phenolics	\$1,100
Chloride	No Charge
Chlorine (Cl ₂)	\$1.10
Chromium (Cr) (Total)#	\$18.00
Cobalt (Co)	\$11.00
Copper (Cu)	\$11.00
Cyanide	\$54.00
Fluoride (F)	\$2.70
Formaldehyde	\$1.10
Grease	\$6.68
Herbicides/Weedicides/Fungicides	\$540.00
Iron (Fe)	\$1.10
Lead (Pb)	\$27.00
Lithium (Li)	\$5.40
Methylene Blue Active Substances (MBAS)	\$0.54
Manganese (Mn)	\$5.40
Mercury (Hg)	\$1,800
Molybdenum (Mo)	\$0.54
Nickel (Ni)	\$18.00
Nitrogen (N) (Total Kjeldahl Nitrogen)	\$0.14
Pentachlorophenol	\$1,100
Pesticides – General	\$540
Pesticides – Organochlorine	\$540
Pesticides – Organophosphate	\$540
PCB	\$540
Petroleum Hydrocarbons (non-flammable)	\$1.80
pH>10, or pH<7	\$0.54
Phenolic Compounds (excluding chlorinated)	\$5.40
Phosphorus (Total)	\$1.10
Polynuclear Aromatic Hydrocarbons (PAH)	\$11.00
Selenium (Se)	\$38.00
Silver (Ag)	\$11.00
Sulphate (SO ₄)	\$0.11
Sulphide (S)	\$1.10
Sulphite (SO ₃)	\$1.10
Suspended Solids (SS or NFR)	\$1.30
Temperature	No Charge
Tin (Sn)	\$5.40
Total Dissolved Solids	\$0.04
Zinc (Zn)	\$11.00

SEPTIC/PORTALOO/MOBILE CLEANING CHARGE

In line with DEUS Model Licence and Best Practice Guidelines Gosford City Council proposes application of a charge for accepting septic, portaloo & mobile cleaning effluent at Council sewage disposal sites. The DEUS recommended charge is \$11.00/kL.

OTHER LIQUID WASTES TRANSPORTED BY DISPOSAL CONTRACTORS

In line with DEUS Model Licence and Best Practice Guidelines Gosford City Council proposes application of a charge for accepting other liquid wastes at Council sewage disposal sites. The charge Gosford City Council wishes to apply is \$1.20/kL.

TRADE WASTE AGREEMENT FEE

Gosford City Council proposes maintenance of the annual Trade Waste Agreement fee in real terms.

LIQUID TRADE WASTE RE-INSPECTION FEE

Gosford City Council proposes a revaluation of the current level of the Trade Waste Re-inspection Fee to reflect proper cost recovery.

Fee Justification

- | | |
|---|------------------|
| • Re-inspection visit (including travel time) | 2hrs @ \$35/hr |
| • Vehicle cost | 1hrs @ \$4.90/hr |
| • Business Overhead | 50% |

Total	\$112.35 + GST
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CHARGE FOR LACK OF PRE-TREATMENT FACILITY

Where Gosford City Council is aware of connected businesses not having pre-treatment facilities as required by Gosford City Council's Liquid Trade Waste Policy or the DEUS Model Policy and that business type, Council wishes to charge offending businesses \$11.00/kL (based on metered water usage or discharge flow meter reading) in line with DEUS Model Policy and Best Practice Guidelines.

Impact of the Proposed Pricing Structure

TRADE WASTE POLLUTANT CHARGE

The impact of the proposed changes is minimal. There are a small number of companies that will experience increased fees due to the poor quality of discharge, which can damage Council infrastructure and affect the safety of Council employees. The new pricing structure and the higher charges levied for BOD, Grease and suspended solids are calculated as appropriate for large dischargers and is aimed at giving companies incentive to discharge waste within our Liquid Trade Waste Quality Standards.

It is estimated that the total additional revenue raised by the proposed pollutant charge will be less than \$10,000.

SEPTIC/PORTALOO/MOBILE CLEANING CHARGE

Current charges for septic dischargers are \$2.60/kL, which raises in the order \$1000 per year. Revenue will increase by around \$3000.

Current charges for Portaloo/Mobile cleaning dischargers are \$0.70/kL. This raises around \$100 per annum. Revenue from 6 dischargers will increase by approximately \$700 per annum (approximately \$120 per discharger).

OTHER LIQUID WASTES TRANSPORTED BY DISPOSAL CONTRACTORS

Current charges for Other liquid wastes are \$0.70/kL. This raises around \$100 per annum. Revenue from these dischargers will increase by approximately \$170 per annum.

TRADE WASTE RE-INSPECTION FEE

Currently Council conducts 130 re-inspections per year. The additional revenue raised would be in the order of \$5000 pa.

CHARGE FOR LACK OF PRE-TREATMENT

There are a small number of businesses likely to be affected by this proposed new charge. If these companies install pre-treatment no additional revenue will be raised. If pre-treatment is not installed and charges are applied then the additional revenue raised will be less than \$10,000 per annum from all businesses.

Summary

Gosford City Council is committed to negotiating better business practices with all of its commercial customers to ensure the integrity and protection of our staff and sewerage infrastructure. If businesses do not wish to comply with Liquid Trade Waste Policy and quality standards then Council seeks opportunity to appropriately charge such companies as per the DEUS Model Licence and Best Practice Guidelines.