Water Industry Overview

INDEPENDENT PRICING AND REGULATORY TRIBUNAL
OF NEW SOUTH WALES

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Other Paper OP-6 January 2000

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1 INTRODUCTION

1.1 Background and scope of this report

The body now known as the Independent Pricing and Regulatory Tribunal (the Tribunal) was established by the NSW Government in 1992. Its purpose is to independently determine maximum prices that may be charged by certain government monopoly service providers. These providers include the four NSW metropolitan water businesses: Sydney Water Corporation (SWC), Hunter Water Corporation (HWC), Gosford City Council (Gosford) and Wyong Shire Council (Wyong).

The Tribunal established medium term price paths for each of these businesses in 1996. The two councils' price paths ended in June 1999 and were replaced by a one-year determination from 1 July 1999. The two corporations' price paths will end in 2000. The Tribunal intends to make medium term price path (MTPP) determinations for the four businesses from 1 July 2000.

This overview seeks to:

- demonstrate the extent of price reform over the period since 1992
- summarise the different operational and institutional arrangements that apply to each of the businesses
- highlight trends in operational and financial performance
- comment on relative movements in costs and efficiencies
- contrast the businesses' performance with the assumptions underlying Tribunal price determinations.

This water industry overview has been prepared in conjunction with the MTPP review of the four water businesses and the associated issues paper.[1] It is intended that this report be produced on a regular basis as part of the Tribunal's monitoring of water business performance. Many of the current issues have been dealt with in detail in the issues paper. Consequently, those issues have been addressed in only a cursory fashion in this initial report.

1.2 Summary of findings

Major findings of this report are:

- Major structural pricing reforms are in place but remain incomplete, particularly for Sydney Water Corporation, Gosford Council and Wyong Council.
- There have been reductions in the underlying real expenditures of the two corporations when measured on a per property basis. When measured on a per property basis, operating expenditure for the two councils has also reduced, but not at the same rate as the corporations.

[1] Independent Pricing and Regulatory Tribunal, *Issues Paper – Pricing of Water, Sewerage and Stormwater Services*, October 1999.

- There is debate at national and state levels on how to assess the financial performance of government businesses. Concentrating on a single measure of financial performance may lead to inappropriate conclusions.
- Generally, the businesses have outperformed the financial assumptions they provided to the Tribunal at the time of the 1996 medium term price path reviews.

1.3 Sources of information

In order to undertake pricing determinations the Tribunal relies on regulatory information to be provided by the water businesses. The businesses are required to complete an information spreadsheet package annually. Information required includes: physical performance measures, service standards, and financial data on an actual and on a projected basis. This information collection procedure started in 1995 with data collected back to 1992/93. Most of the data used in this report has been drawn from the Annual Information Returns. Some data is also drawn from published annual reports. Whilst information has been collected since 1992, it has not been collected in a consistent manner.

The two councils changed their reporting formats from calender year to financial year in 1993. Thus, the results for 1994/95 for the councils are the first results shown on a financial year basis (figures for 1992/93 are actually for the1992 calendar year, and figures for 1993/94 are actually for 1993 calendar year).

2 PRICING REFORM

2.1 Introduction

The level and structure of prices can influence a customer's access to water and disposal of wastewater. Traditionally, water businesses have set their charges on the value of the property serviced together with a prepaid water allowance and an excess water charge. The impact of this pricing regime is that charges do not reflect the costs of water usage. This can lead to substantial cross subsidisation between different customer groups.

In its Inquiry into Water and Related Services (1993), the Tribunal recommended a number of reforms for the water industry in NSW. The Council of Australian Governments (COAG) subsequently endorsed an approach[2] which provides a national framework for reforms for the water industry. The key pricing reforms involve the introduction of consumption based pricing, full cost recovery, the removal of cross subsidies where practicable, and the requirement to make any remaining subsidies transparent. The extent to which states achieve these reforms has a bearing on the payments to the states by the Federal Government under the Competition Policy Agreement. The National Competition Council (NCC) assesses compliance with the reforms. The Tribunal gives due consideration to the COAG reforms in its determinations.

The pace of pricing reform depends on a number of factors. Key considerations include:

- the financial viability of the water businesses
- commitments to health, environmental and customer quality standards
- capacity constraints
- the impact of change on customers
- the extent to which efficiency gains within the water businesses can be used to fund reform
- community acceptance of change and the associated need for education.

This chapter outlines the price reforms that have occurred since 1992 and the additional reforms that may be considered. National developments (eg competition policy and COAG) will have a significant influence on further reform.

2.2 Periodic pricing

When the Tribunal was established in 1992, the four metropolitan water businesses were at various stages in the reform of water pricing. Currently, the two corporations have two part tariffs based on a fixed charge and a usage charge. All the businesses have moved their emphasis away from property value based charges to usage based and access charges. This has caused a shift in the revenue base away from reliance on property value based charges. It has also resulted in the water businesses sharing some of their efficiency gains with customers. Furthermore, it has reduced the social impacts of price reform.

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2 Council of Australian Governments, Water Reform Package, February 1994.

Sydney Water has removed property value based charges for residential customers and is phasing out these charges for non-residential customers. Forecasts indicate that the value of property based charges to Sydney Water will be reduced to $41 million in 1999/2000. (It was $210 million in 1992/93).

In 1996 the Tribunal's price path determination for Sydney Water fixed charges for the following four years. The level of the charges was set after considerable financial analysis. The analysis was based on assumptions about the future, including estimates of inflation. The method of price setting used in the 1996 determination can result in gains or losses to a water business because of factors outside the control of the water business. The Tribunal will review this method of price determination as part of the 2000 review. In its mid term review of the price path in 1998, the Tribunal noted that actual inflation was considerably lower than was forecast in 1996. Consequently, Sydney Water had received greater revenue than expected. The Tribunal decided to return those excess returns to customers.

Hunter Water removed property value based charges for water and sewerage services in 1994/95. Water and sewerage service charges have service and usage components for residential and non-residential customers.

Gosford and Wyong have also removed property value based charges, but unlike Sydney Water and Hunter Water, have retained a prepaid water allowance and excess water charge instead of a simple, two part tariff structure. In principle, the Tribunal supports two-part pricing with a usage component for all consumption. If adopted for the MTPP determinations in 2000, this strategy would see the elimination of the prepaid water allowances for the two councils. The Tribunal is concerned about the impacts any change might have on customer groups. The councils will be required to provide information about potential impacts at the 2000 review.

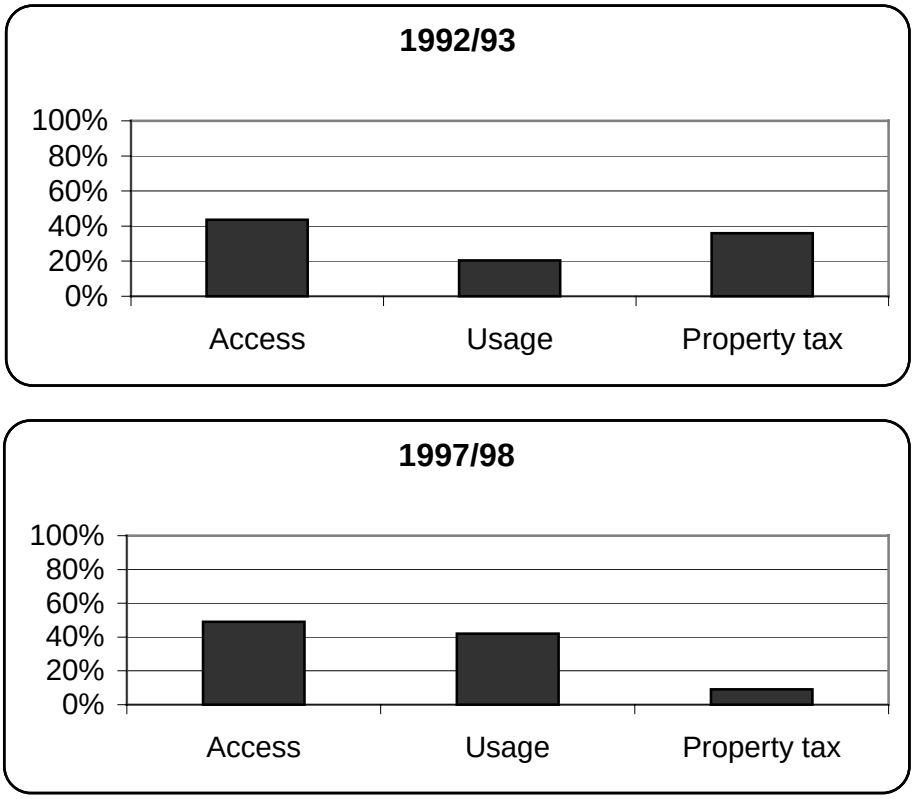
2.2.1 Shift in revenue base to usage and access charges

Figure 2.1 shows the change in the businesses' revenue bases since 1992/93 as they have moved away from property value based charges to service and usage charges:

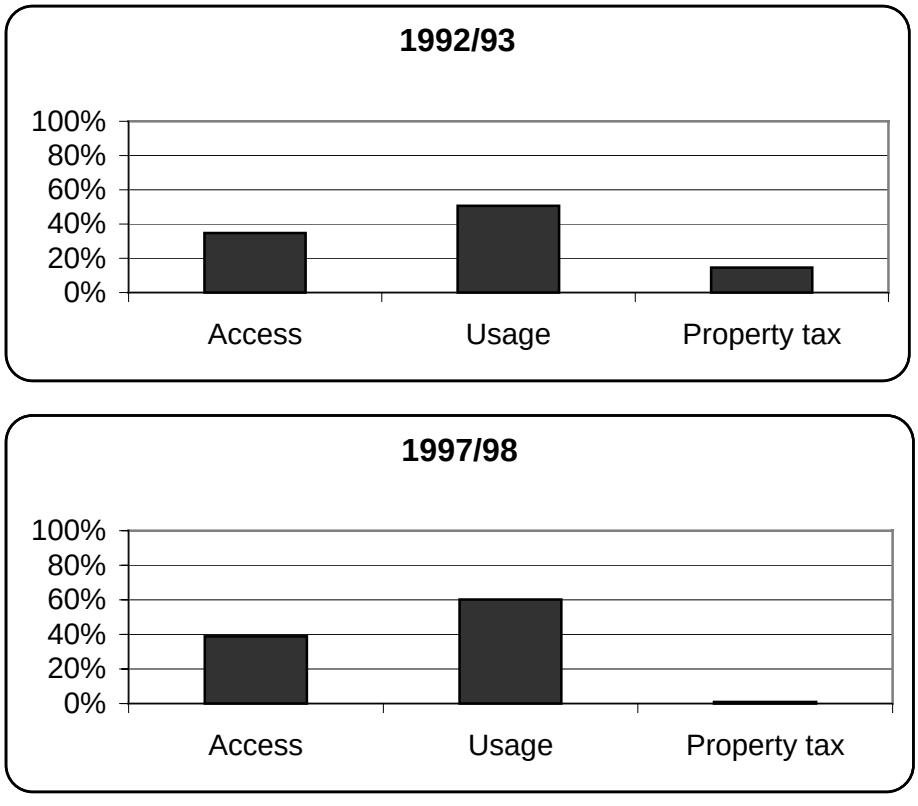
- The councils have a much lower proportion of usage revenue than the two corporations. This difference reflects the existing prepaid water allowance in the councils' pricing structure. In 1997/98 Hunter Water recorded the highest proportion of usage revenue at 60 per cent of total tariff income. Sydney Water has doubled its proportion of usage revenue since 1992/93. These changes have been accompanied by a declining proportion of revenue from property valuation charges.
- The combined access charges for water and wastewater services provided most of the tariff revenue base for the two councils in 1997/98.

Figure 2.1 Sources of revenue

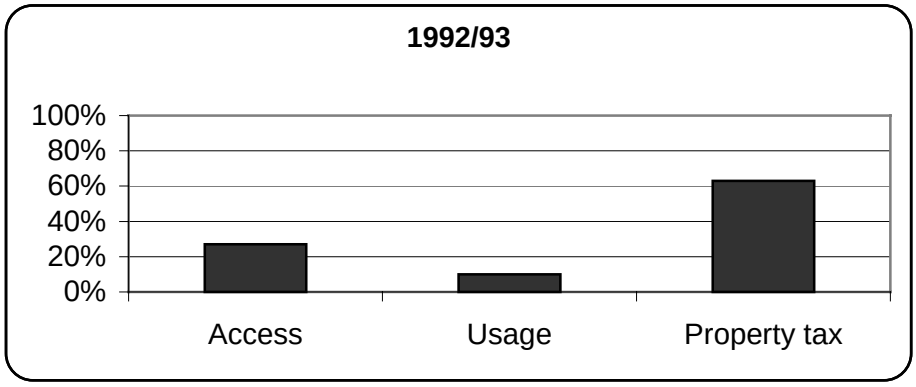
SWC

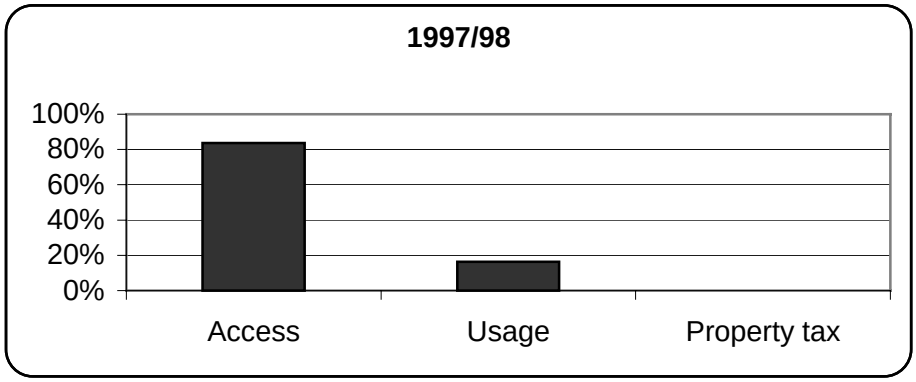


HWC

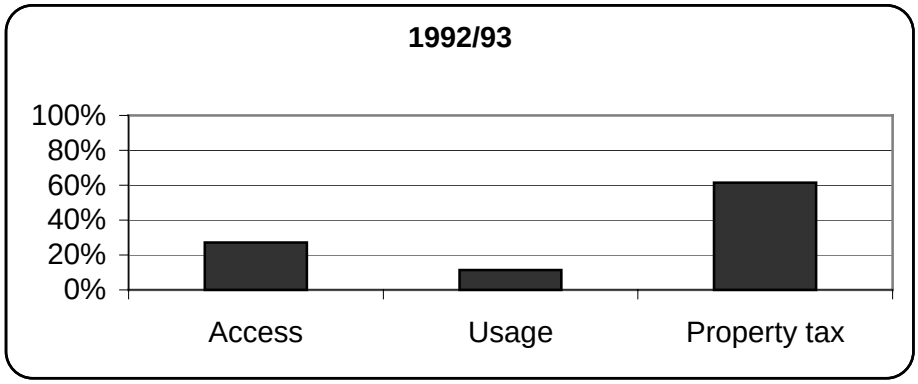


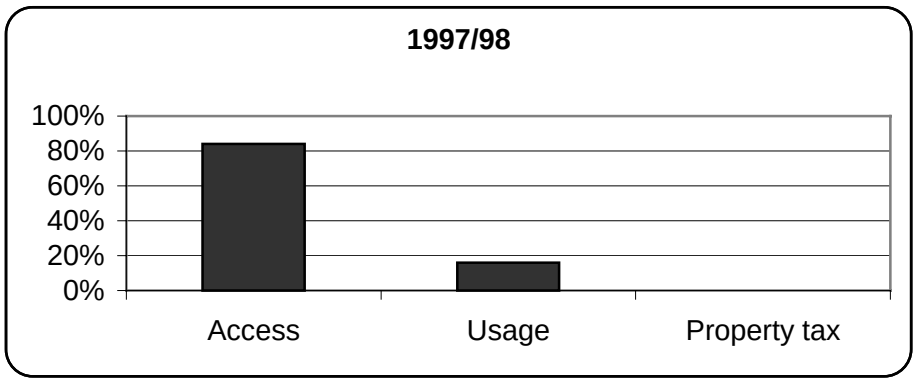
Gosford Council





Wyong Council



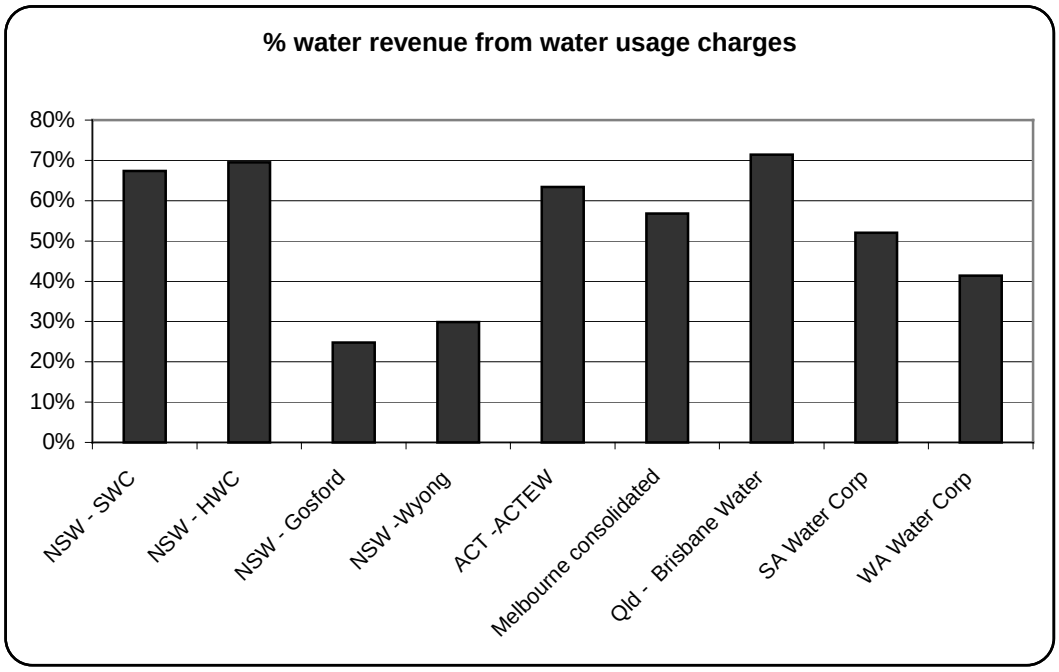


Source: Annual information returns; consolidated entity view.

Figure 2.2 compares revenue from water usage charges to total water revenue for various water businesses:

- Sydney Water and Hunter Water achieved some of the highest levels among Australian major water businesses in 1997/98.
- The two Councils' water usage revenue is low because of the prepaid component of their pricing.

Figure 2.2 Comparison of proportion of water revenue from usage charges to total water revenue of major water businesses in 1997/98



Source: WSAAfacts '98:
Wyong Council information from Annual Information Return.
Notes:
Yarra Valley Water, City West Water and South East Water Limited are represented as a single business as Melbourne Consolidated.

Pricing in the form of usage charges for wastewater for residential customers has not been widely adopted by the four metropolitan businesses. Only Hunter Water has significant usage revenue from residential wastewater. All businesses have wastewater usage charges for non-residential customers. However, in general, usage charges are based on a percentage of the measured water flows into a property. Most of the cost recovery from wastewater service provision comes from fixed charges.

2.2.2 Impact on businesses

The shift from property value based charges to a pay-for-use charging system has had a significant impact on the businesses' revenues. Figures 2.3, 2.4 and 2.5 show that:

- There has been greater volatility in revenues across the four water businesses since 1992/93.
- Both the water and the sewerage businesses of all water businesses were significantly affected by the phasing out of property based charges. By 1997/98, average revenue per

property (Figure 2.5) of the water businesses had declined by between 12 per cent (Sydney Water) and 24 per cent (Wyong).

- The sewerage business has been affected more severely than the water business. Between 1992/93 and 1997/98, average revenue per property (Figure 2.5) from sewerage operations decreased by a minimum of 26 per cent.
- As property based charges generally had a more significant impact on non-residential customers, the change to usage pricing has affected non-residential revenues more than residential revenues.

Figure 2.3 Combined revenue

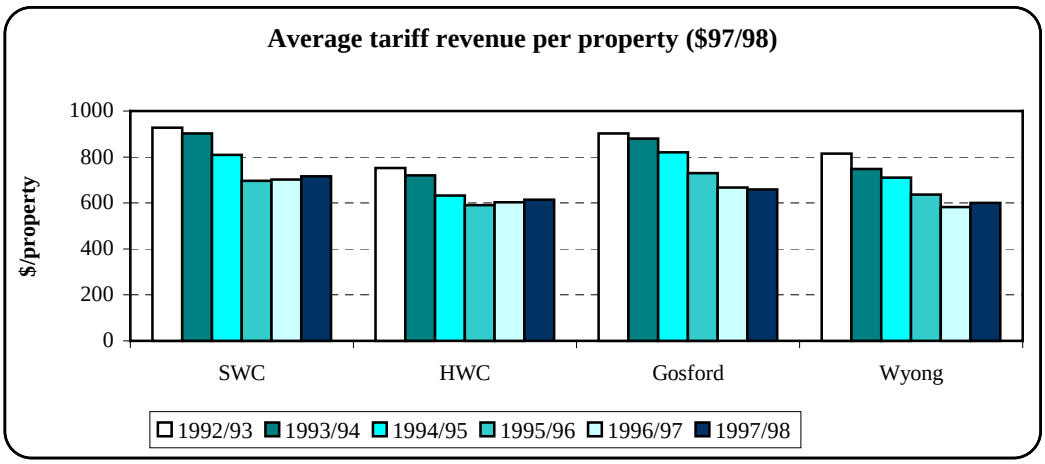


Figure 2.4 Water revenue

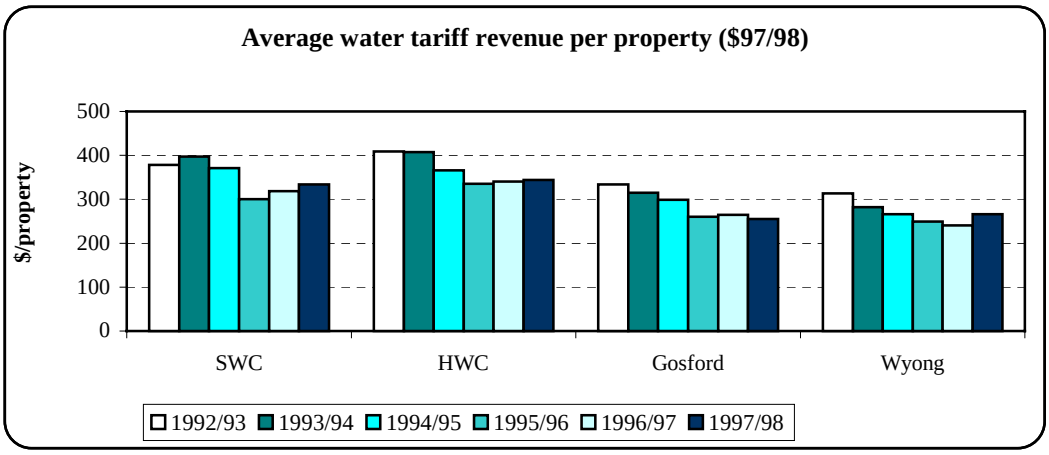
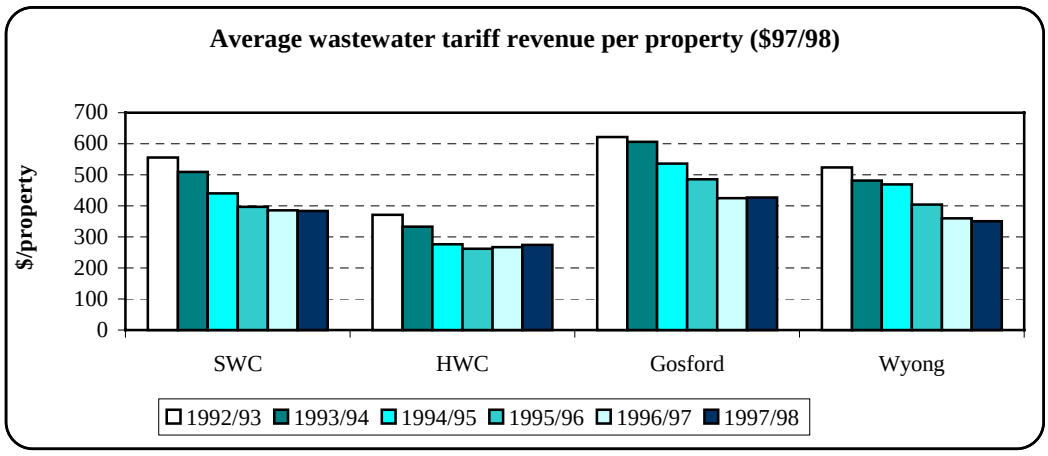


Figure 2.5 Wastewater revenue



Source: Annual information returns; consolidated entity view.

2.2.3 Impact on customers

The introduction of price reforms has resulted in real price reductions for customers. The following graphs present real price indices comparisons on a residential, non-residential and combined basis. The price indices use the real average revenue per property earned by the businesses in the past six years to reflect price changes (although revenues may also be affected by variations in usage patterns).

Based on these measures, figures 2.6, 2.7 and 2.8 show:

- Real prices have fallen steadily since 1992/93. This reduction in real prices is the result of the Tribunal's price determinations. The determinations have limited price increases in order to encourage improvements in the efficiency and productivity of the water businesses while still yielding an appropriate financial return. Further analysis of cost efficiency and productivity is provided in chapter 4.
- Sydney Water's and Hunter Water's reductions in the combined index were driven mainly by the non-residential sector. Real prices for non-residential customers of Sydney Water and Hunter Water fell by 53 per cent and 30 per cent respectively from 1992/93 to 1997/98 (Figure 2.8). The reductions came about through the continuing removal of property value charges.
- Lower real prices for residential customers have driven Gosford Council's general price reductions since 1992/93 (Figure 2.7). This followed the elimination of Gosford Council's property value tax on the residential sewerage service in July 1994 and a continuing reduction in service availability charges for water and sewerage. There have been some fluctuations in the real price level for Gosford Council's non-residential customers in the past five years (Figure 2.8). In 1996/97, Gosford Council reclassified various customers and developed improved data on meter reading on non-residential properties. This was a factor in the rise in the price index for non-residential customers in 1996/97 and 1997/98.
- Wyong Council has been successful in reducing real prices for both residential and non-residential customers. It has achieved an overall reduction of 26 per cent since 1992.

Figure 2.6 Combined real price index

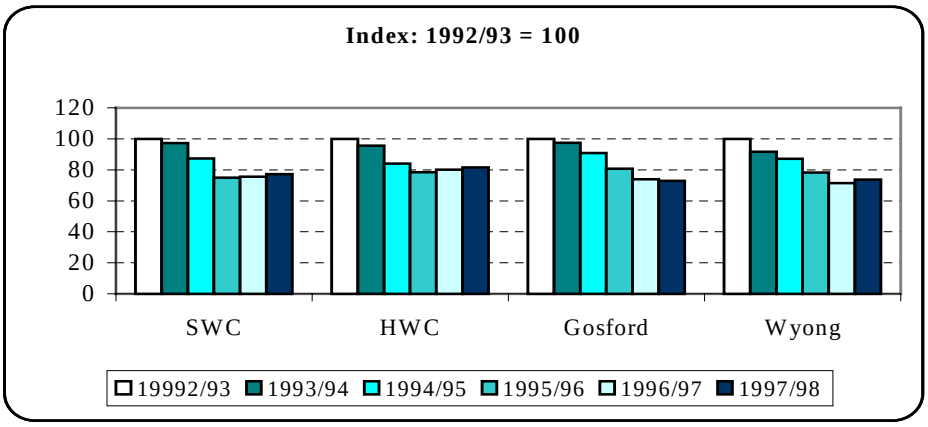


Figure 2.7 Residential real price index

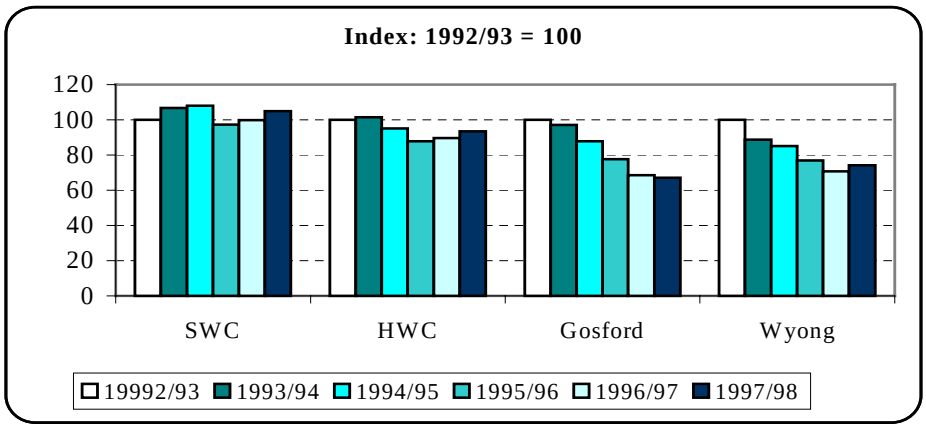
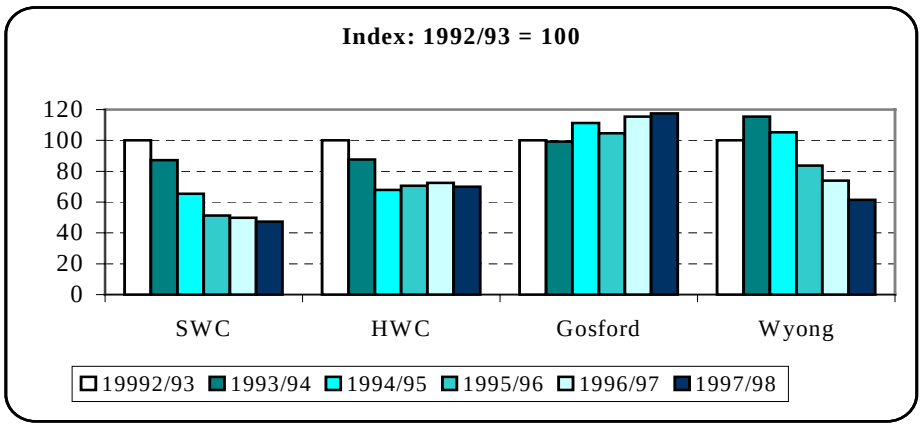


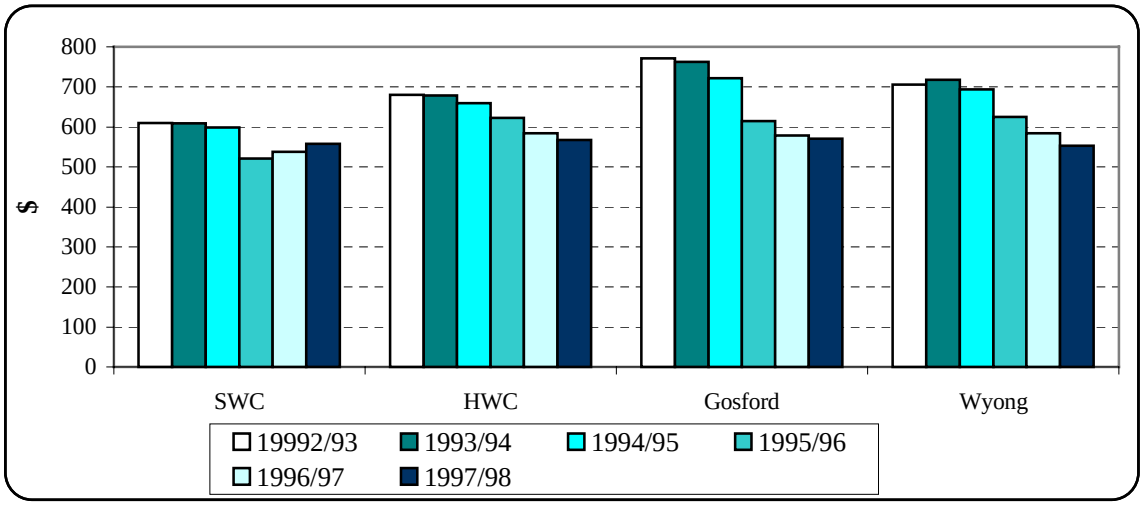
Figure 2.8 Non-residential real price index



Source: Annual information returns; consolidated entity view.

Figure 2.9 shows that an average household's residential water and sewerage bill has declined in real terms across the four water businesses (consumption of 250 kLs per year was assumed for residential customers). The reductions range between 8 per cent for Sydney Water to 26 per cent for Gosford Council. Construction of an average bill for non-residential customers is difficult because of the wide variation in levels of consumption.

Figure 2.9 Average residential water and sewerage bill (97/98 $)



Note: Based on average annual water consumption of 250 kL and average residential land value of $39,000 (1980 value) for Sydney Water and $30,000 for Gosford Council.

Source: Annual information returns; consolidated entity view.

2.3 Developer charges

Water businesses have two primary sources of revenue: regular quarterly (or annual) charges, and developer charges. Developer charges are up front charges paid by developers to water businesses. They are intended to recover part of the infrastructure costs incurred in servicing new developments. Prior to 1996, NSW urban water businesses used a range of methods to calculate developer charges. Different levels of cost recovery were achieved by individual businesses.

Charges for infrastructure for new developments should signal the relative costs of providing such infrastructure. The Tribunal introduced a net present value methodology for developer charges in the December 1995 Price Determination for Sydney Water and the 1996 Medium Term Price Determinations for the other businesses. This methodology attempted to introduce a consistent approach to calculating of developer charges.[3] The methodology aims to establish an approach which signals the cost of new development without an excessive impact on housing affordability and without distorting the form of urban development.

[3] IPART, *Sydney Water - Prices of Water, Sewerage and Drainage Services from 1 July 1995*, June 1995. IPART, Hunter Water - *Prices of Water, Sewerage and Drainage Services – Medium Term Price Path from 1 July 1996;* Gosford City Council - *Prices of Water, Sewerage and Drainage Services – Medium Term Price Path from 1 July 1996;* Wyong Shire Council - *Prices of Water, Sewerage and Drainage Services – Medium Term Price Path from 1 July 1996, June 1996.*

2.4 Drainage charges

Currently drainage (or stormwater) charges are based on property values for the two corporations and a fixed charge ($40) for Gosford City Council. They are recovered as part of normal council rates by Wyong Council.

Within Sydney, Sydney Water provides only 25 per cent of its water customers with stormwater services. The remainder are provided with stormwater services by local councils.[4] Following a request from the Premier, the Tribunal has reviewed Sydney Water's stormwater revenue and expenditures.[5] The review found that the current basis of Sydney Water's charges for stormwater is inappropriate. Charges should, as far as possible, be catchment based and linked to environmental impacts. The Tribunal considers that Sydney Water could devote more resources to the drainage area. Drainage charges will be considered as part of the 2000 MTPP review.

2.5 Conclusion

The progress of pricing reforms has seen the four urban water businesses in NSW shift away from traditional property value based charges and move towards a two part charging system based on a fixed component and a usage component. This has resulted in considerable changes in the composition of revenue for the water businesses. Revenue now comprises mainly access and usage charges.

The phasing out of property value based charges has also resulted in more volatility in revenue patterns for the four water businesses. The former high proportion of property value based charges had created cross subsidies from the business sector to households. As reform has progressed, cross subsidies have diminished and consequently, revenue from the non-residential sector has fallen.

Pricing reform remains incomplete for the four businesses. Hunter Water's pricing is the most advanced. Impetus for further reform will come from the need to comply with the objectives of the COAG Water Reform Agenda, the push for competition and evolving community attitudes towards demand management and environmental issues.

4 In Sydney Water's area many of the local councils have responsibility for drainage charges and collect them as part of normal rates.

5 IPART, *Review of Sydney Water Corporation's Stormwater Charges and Expenditure*, August 1998.

3 FINANCIAL PERFORMANCE

3.1 Overview

Increasing attention is being given to determining the appropriate measures for assessing the financial performance of government owned monopoly service providers. If governments are able to reliably assess financial performance, they are then able to formulate strategies to encourage higher levels of performance from their businesses. This leads to efficiency improvements and better financial returns.

Wherever possible, the preferred strategy is the introduction of competition. However, when competitive markets cannot be developed, the measurement of performance becomes more critical.

Significant importance is given to rate of return. Without an appropriate rate of return there will be either an over or an under investment of resources in the water industry. However, reliance on the rate of return as the sole measure of financial performance inadequately captures the financial health of an enterprise. Nor does such an approach provide appropriate incentives for a regulated business to operate more efficiently.[6]

Measurement of rate of return depends upon resolving accounting measurement problems such as the appropriate valuation of assets. In the absence of their resolution and to provide greater depth to the analysis, it is necessary to examine a wider range of financial performance measures. In this context, the Tribunal places significant emphasis on cashflow analysis to complement the rate of return analysis.

The water businesses are very capital intensive and generate significant cashflows. Their net debt levels are declining, operating expenses are decreasing, and underlying capital expenditure programs are being deferred as maintenance practices improve, population growth slows, and the demand for water per customer drops. These reductions must be assessed against the longer term implications for service levels and plant condition.

However, a major cost driver is the need to ensure that future development is ecologically sustainable. What this will involve and how much it will cost have yet to be assessed.

Financial analyses of each water business are included in Attachments 1 to 4. The following section compares the businesses' performance through a number of key indicators.

3.2 Comparison with similar non-water industry organisations

It is beneficial to compare organisations operating in similar financial environments. However, careful judgement must be exercised because the differences in environments may influence the results of analysis (eg differing service standards; supply requirements). The following section compares the four water businesses with the Australian Gas Light Company (AGL) and energyAustralia (EA).

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[6] If profit is the measure of financial performance, then performance can be improved by higher revenues or lower costs. Rate of return is linked to asset value. If pricing is linked solely to rate of return, there is an incentive to increase the size of the asset base to achieve higher prices. However, efficiency improvements are achieved by reductions in costs.

A large private sector corporation, AGL operates in the energy services area, dealing in natural gas, liquid petroleum gas and electricity. A state owned corporation, EA is responsible for distributing electricity to the Sydney and Newcastle areas. It operates in the emerging national electricity market. The largest distributor of electricity in Australia, EA operates under a legislative framework similar to that of the Sydney Water Corporation and the Hunter Water Corporation. Gosford and Wyong Councils operate as multi-purpose councils within local government.

3.2.1 Financial comparison

Table 3.1 gives an indication of the relative sizes and financial characteristics of the six organisations.

Using total revenue as the basis for comparison, the points of significance when comparing the public sector businesses to the private sector AGL are:

- The higher value of asset bases (indicated by the property, plant and equipment figures) of the public sector entities.

  This variation in asset values can be attributed to:
  - The relative capital intensity of the industries.
  - Differing asset valuation policies. Private sector owned assets are generally reported at historic cost (ie original purchase price less provision for depreciation) whereas many public sector organisations report on a current replacement cost basis (less provision for depreciation).
  - AGL and EA have networks which distribute product to their customers. Water businesses have distribution networks which take product to customers, but also have networks to remove wastes, and facilities to pump, treat and store product.
  - The water industry relies heavily on customer contributed assets. Having customers make upfront contributions for assets decreases the need for the water businesses to generate sufficient revenue to finance such assets. Accounting treatment of capital contributions has varied between the water businesses.
- Higher levels of public sector debt:
  - In the private sector, debt is determined by market imperatives and internal management policies. State Treasury strongly influences the capital structure of state owned corporations.
- Comparatively high employee numbers in the public sector water businesses:
  - The private sector primarily emphasises efficiency. The public sector often has to balance efficiency objectives with public policy objectives. In addition, there are specific maintenance requirements for different types of asset systems. This helps explain the variation in employee numbers.

Neither of the two councils pays dividends and income tax. Consequently, their earnings after tax are relatively high when compared with their revenues.

Table 3.1 Financial characteristics for 1997/98 ($m)

	Sydney Water	Hunter Water	Gosford Council	Wyong Council	Energy Australia	Aust Gas Light Co
Total revenue	1,229	130	43	36	1,873	1,338
Operating & misc expenditure	672	56	19	19	1,274	963
Interest/borrowing costs	175	7	7	4	122	41
Depreciation and amortisation	181	27	10	10	170	86
Abnormal items	42	4	-	5	54	22
Earnings before tax and cap cons	242	44	7	8	360	270
Property, plant & equip (book)	13,181	1,907	528	504	2,822	1,492
Total assets (book value)	14,061	2,048	585	524	3,746	2,982
Total debt (inc overdraft)	1,747	84	80	43	1,296	887
Total liabilities	2,510	186	87	50	2,166	1,590
Operating cashflow	296	46	20	8	398	264
Capital expenditure	196	37	4	9	174	253
Number of employees	4,629	555	203	203	3,017	2,096

Source: Annual reports and Annual information returns; consolidated entity view.

**Note:*

1. *Figures for comparison are taken from the consolidated entity for those corporations whose operations encompass more than one activity.*
2. *AGL has received income from capital contributions in the past, but not in 1997/98.*
3. *Some assets and their corresponding liabilities are off balance sheet (eg AGL Goldline, Sydney Water Boo plants).*
4. *The book value of assets does not necessarily agree with the regulated asset value.*

3.2.2 Financial indicator analysis

When setting prices, the Tribunal examines a broad range of financial indicators. Relying on only a few indicators or on only one class of indicator may lead to an incomplete view of the financial health of an organisation. Table 3.2 lists financial indicators for the water businesses and for AGL and EA.

Corporate accounting policies can influence financial ratios. Whilst the Tribunal has regard for rate of return (as required under s15 of its Act) the Tribunal also has regard for ratios with a primary emphasis on cashflows. These include ratios used by credit rating agencies and State Treasury:[7]

- Cash based ratios:
  - *Funds flow adequacy ratios* and *internal financing ratios* measure the ability to generate cash to cover primary cash requirements such as dividends and capital expenditure. These are stronger for the Councils than for EA and AGL. This shows that the Councils are in a good position to cover their requirements with cash from operations. Unlike the other four organisations, the Councils have not been required to pay tax or dividends. Hunter Water's ratios lie between those of AGL and EA. Sydney Water's ratios decreased in 1997/98 due to a significant increase in dividends payable in 1997/98 compared with previous years.

[7] NSW Treasury, *Capital Structure Policy for NSW Trading Enterprises*, August 1994, p iii.

- The businesses' ability to cover debt payments (*funds flow net debt payback ratio*) and interest payments (*funds flow interest coverage*) from cashflow is strong. Sydney Water's ratios deteriorated in 1997/98 due to the requirement for $209 million to be paid in dividends compared with $78 million in 1996/97. Hunter Water has an excess of cash over debt.

- Ratios derived from the profit and loss account:
  - The ratios comparing profit to revenue (*PBIT/total revenue* and *PBITDA/total revenue*) show that the water businesses convert revenue to operating profit better than both energyAustralia and AGL. This reflects the high capital intensity of the water industry.
  - Ratios affected by asset valuation (*PBIT/funds employed* and *total debt/total capital*) for the water industry are generally low when compared with ratios for private sector industries with large infrastructure networks. This comparison may be distorted by differing approaches to asset valuation, as discussed in 3.2.1. This normally results in significantly higher asset values for the water businesses. Nonetheless, the water industry's ratios lag behind those of the other public sector entity energyAustralia as well, possibly reflecting:
    - the relative capital intensity of the two industries
    - past 'social' pricing in the water industry, ie efforts by government to use pricing policy to pursue social equity objectives
    - greater revenue certainty (ie lower revenue risk) in the water industry
    - the long lives of many water industry assets.

Table 3.2 Ratio analysis for 1997/98

	Energy Australia	Aust Gas Light Co	Sydney Water	Hunter Water	Gosford Council	Wyong Council
Funds Flow Adequacy	0.96	0.68	0.69	0.93	6.09	1.94
Funds Flow Interest Coverage	5.28	9.10	3.89	62.13	4.35	5.20
Funds Flow Net Debt Payback	2.93	2.17	4.58	-0.36	2.68	2.34
Internal Financing Ratio	0.93	0.52	0.29	0.82	6.09	1.94
Pre-tax Interest Coverage	3.72	7.01	2.52	37.05	2.38	2.03
Total Debt / Total Capital	0.45	0.39	0.14	0.04	0.14	0.08
PBIT / Total Revenue	0.22	0.22	0.28	0.33	0.29	0.18
PBITDA / Total Revenue	0.31	0.29	0.43	0.55	0.53	0.46
PBIT / Funds Employed	0.14	0.13	0.02	0.02	0.02	0.01
PBIT ($000s)	405,700	288,700	332,974	40,462	11,745	6,304
PBITDA ($000s)	575,600	375,000	514,465	67,842	21,452	16,162

Source: Annual reports and Annual information returns; consolidated entity view.

Notes

1. *Information reflects the consolidated view of each organisation.*
2. *For consistency, the figures for purchases of property, plant and equipment net of capital contributions have been used as a measure of capital expenditure.*
3. *Definitions of indicators are listed in Attachment 1.*

The more common financial ratios, such as *rate of return*, are understood by most industry participants. When measures reliant on asset values are the basis of comparison, the water businesses do not measure up to other industries. Therefore, measures such as *PBIT/funds*

employed strongly favour the private sector's AGL and the other public sector entity studied, energyAustralia. These measures must be implemented judiciously because varying valuation policies and subjectivity influence the valuing of assets.

When comparisons are performed on a cashflow base exclusive of asset valuation problems, the water businesses compare well. This can be viewed as a positive, and perhaps more reliable, indicator of financial strength.

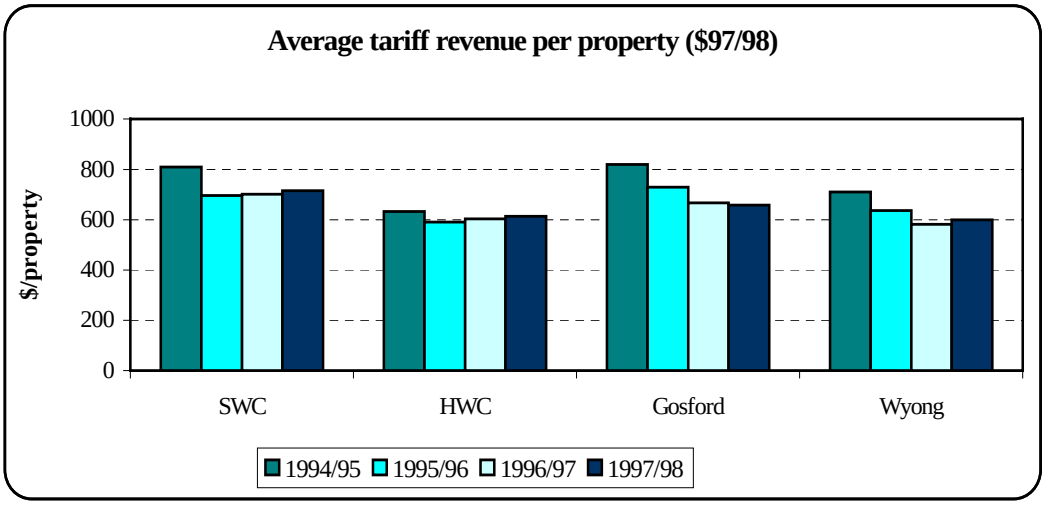
3.3 Performance trends

The two corporations provide information to the Tribunal on a financial year basis. The two councils moved from a calendar year financial reporting basis to a financial year basis in 1994/95. The following comparisons are made for the years 1994/95 to 1997/98 only.

3.3.1 Revenue trends

In real terms, total revenue for the four water businesses has fallen since 1994/95. On a per property basis, the fall is more evident. The downward trend has been heavily influenced by the Tribunal's pricing determinations. The main objective of the pricing determinations was to encourage businesses to be more efficient while minimising potentially negative social impacts. In comparing water industries Australia-wide, the 1997 report of the Australian Urban Water Industry[8] comments that Sydney Water Corporation and Hunter Water Corporation are the main contributors to a notable reduction in national water revenue in the period 1990/91 to 1995/96.

Figure 3.1 Tariff income per property (1997/98 $)



Source: Annual information returns; consolidated entity view.

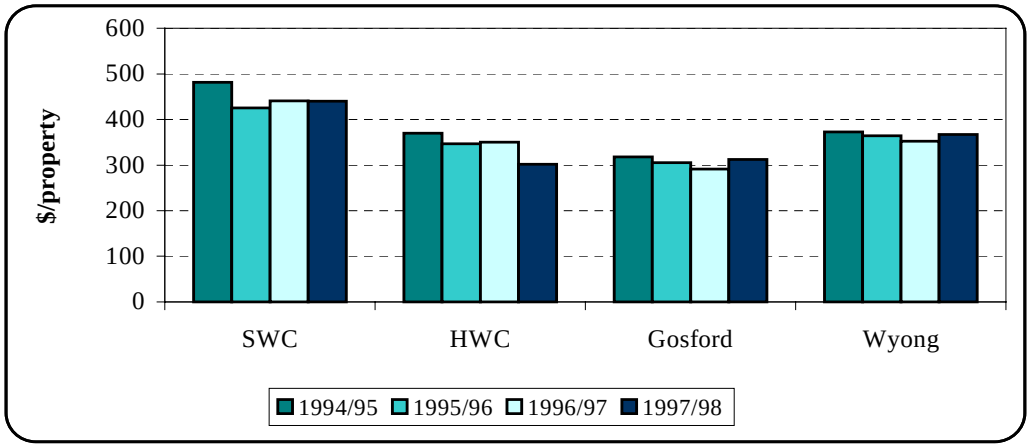
3.3.2 Expenditure trends

In real terms, operating expenditures (exclusive of depreciation and interest) have been static or have reduced slowly. On a per property basis (see Figure 3.2) there is a more pronounced downward trend for the two corporations. However, the councils are lower than SWC in absolute terms. This trend would be even greater if costs for Build Own Operate (BOO) projects were removed from Sydney Water's figures. These BOO costs were incurred to

8 The Australian Urban Water Industry; *WSAA facts '96.*

improve the quality of water supplied to customers. However the Sydney Water incident of 1998 highlighted that these plants were not designed to remove all microbiological contaminants.

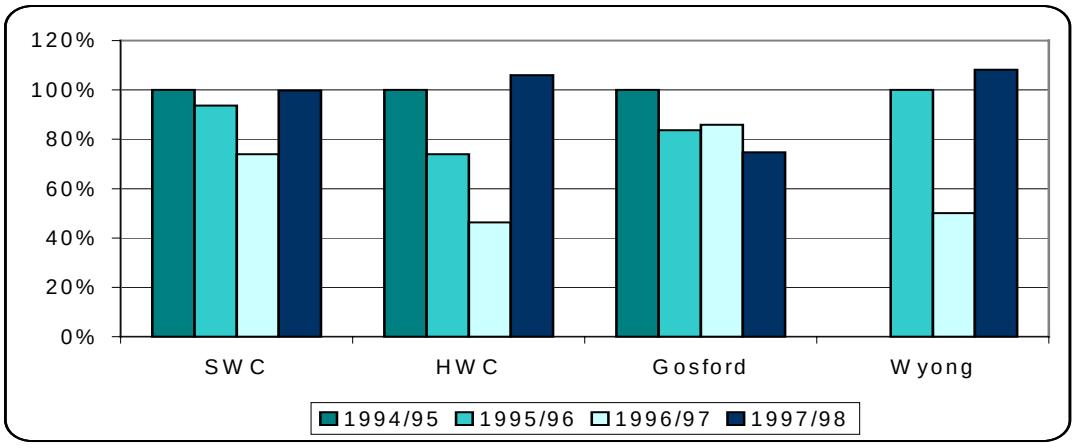
Figure 3.2 Operating costs per property (1997/98 $)



Source: Annual information returns; consolidated entity view.

The trend in capital expenditure for the two corporations was declining until 1997/98 (see Figure 3.3). Reductions in capital expenditure have allowed the corporations to retire debt and/or build up cash levels. Gosford Council's capital expenditure has been declining. There has been little growth in the Gosford area in recent years. Some data was unavailable from Wyong.

Figure 3.3 Index of capital expenditure (1997/98 $; Base = 1994/95, 1995/96 for Wyong)



Source: Annual information returns; consolidated entity view.

In the bulk water industry[9], the Tribunal has completed a review of the Department of Land and Water Conservation's asset management processes. A similar review is planned for the water businesses for the next major pricing review in 2000. This will help the Tribunal to ensure that prices are sufficient to meet future capital expenditure requirements.

[9] The bulk water industry comprises users of water for irrigation and country towns. This includes water from both regulated and unregulated river systems.

3.4 Conclusion

The four businesses are in a strong financial position. This view is reinforced when their financial ratios, calculated on a cashflow basis, are compared with those for the Australian Gas Light Company and energyAustralia.

The Tribunal aims to encourage greater efficiencies in the water businesses in line with appropriate levels of standards of service. In its determinations, the Tribunal must provide incentives for the businesses to continue to improve their performance.

4 COST TRENDS AND PARTIAL PRODUCTIVITY MEASURES

The Tribunal has encouraged the four urban water businesses to improve efficiency and productivity by reducing the costs of service provision. This chapter examines the performance of each of the four water businesses in achieving cost reductions and productivity improvements since 1994/95. Further analysis can be found in the Tribunal's Issues Paper for the 2000 medium term price path determinations.

Partial productivity measures are used to measure performance because they are simple to calculate and easy to understand. More comprehensive techniques, such as data envelopment analysis, can in principle provide a better guide to performance. These techniques have not been used in this analysis because they require information which is difficult to obtain. Partial productivity measures must be interpreted with care. Individual results must not be viewed in isolation because separately they may not give an appropriate view of operational performance.

4.1 Cost trends

Because total costs provide a measure of the underlying cost structures of water businesses, they are an indicator of overall performance and efficiency. Breaking down total costs enables comparisons to be made between respective elements of an organisation. The components of the total cost of service provision are operating costs, a return *of* capital and an appropriate return *on* capital. For the purposes of this analysis, depreciation is used to measure return of capital. The residual of revenue less operating costs and depreciation is used to measure return on capital so that total costs equates to total revenue.

The term, 'operating costs', refers to the operations and services, maintenance and administration costs incurred at the core business level of the water businesses. Operating cost trends provide a measure of how efficient a water provider is in areas which are relatively more controllable in the short run. Operating costs in the water industry are significant as they cover items such as labour, materials, contracting and energy costs. These determine the level of distribution, treatment, and collection costs.

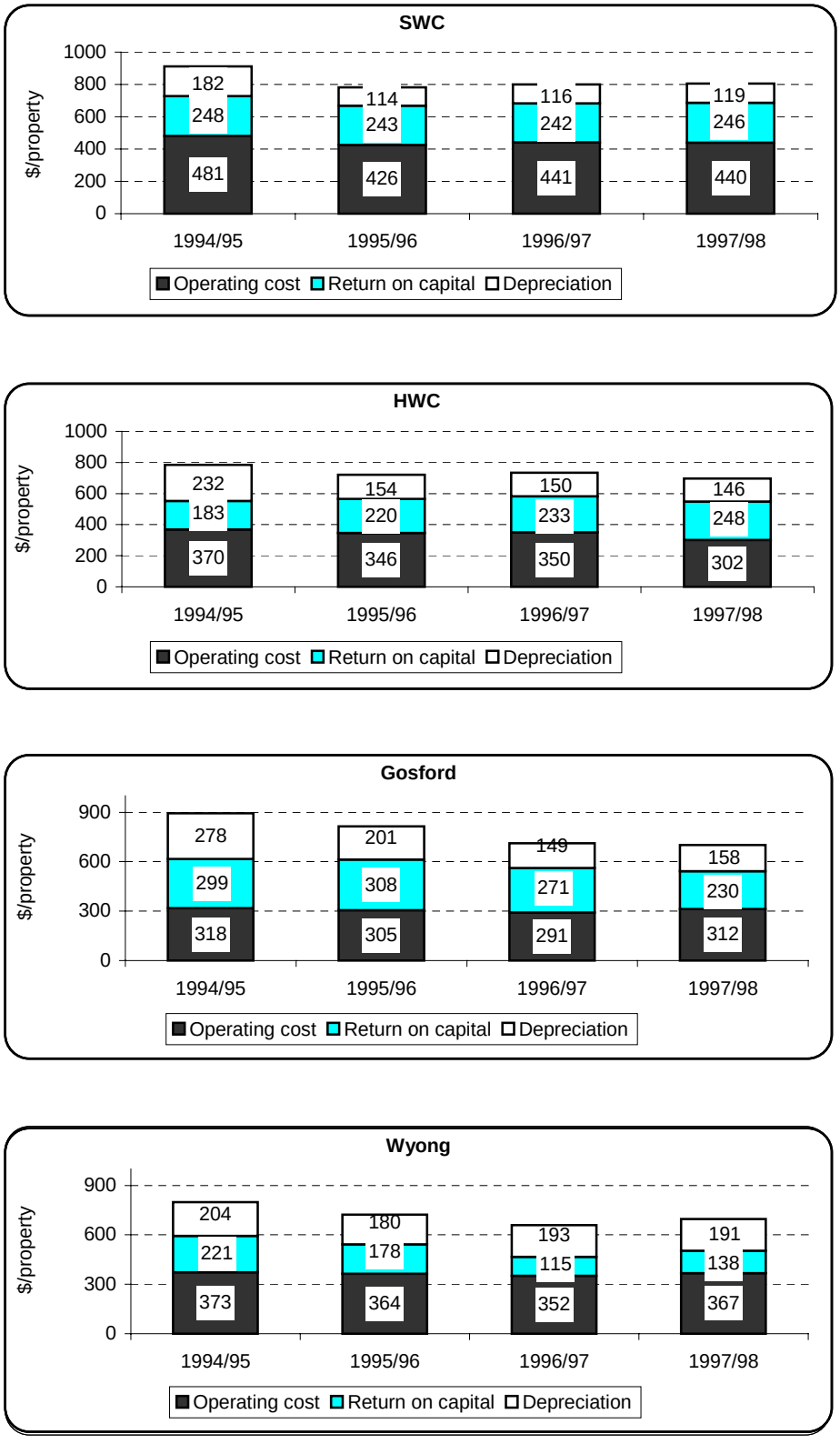
4.1.1 Cost per property for core businesses

Total cost per property

Total cost per property provides an indication of the overall cost efficiency achieved by each water business. Total cost per property also gives some indication of the long term trend in water business performance. For example, a decreasing depreciation cost can be an indicator of lower levels of capital expenditure. That suggests that the existing infrastructure is being driven harder and not replaced. The trend in capital expenditure for the four businesses has generally been downward over the past four years. There was some upturn in 1997/98 (see chapter 3).

Figure 4.1 reveals that, in real terms, total cost per property for the four water businesses has been declining steadily since 1994/95. Sydney Water and Hunter Water have achieved this largely by reducing their depreciation and operating costs. Gosford has reduced its depreciation costs and return on capital. Wyong's reductions are mainly the result of a decline in return on capital.

Figure 4.1 Total cost per property ($97/98)



Source: Annual information returns; consolidated entity view.

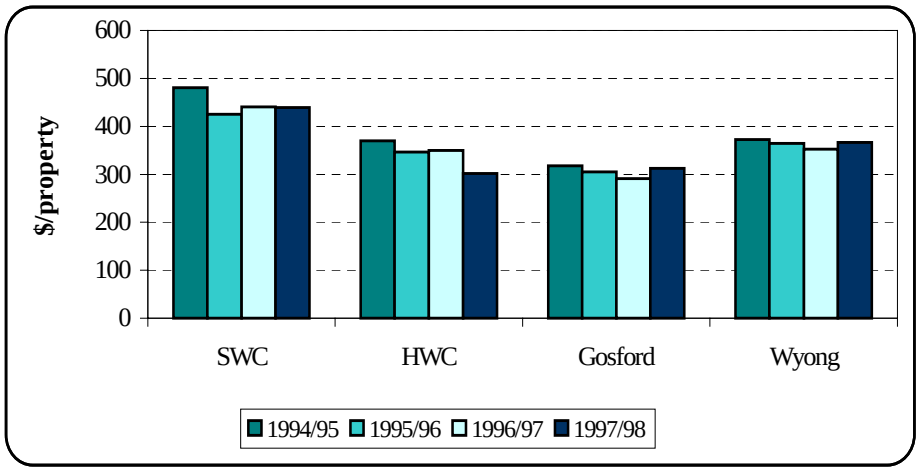
Operating cost per property

Operating costs are often referred to as 'controllable' costs. Financing costs are determined externally by lending institutions operating in a market environment. Conversely, operating costs are directly influenced by the actions of businesses. Therefore the ratio of operating costs per property is a useful tool for assessing changes in efficiency.

When operating costs are measured on a unit basis, inter-business comparisons are possible. However, differences in the operating environments of the businesses can influence results significantly. A more meaningful measure is the trend in costs per unit over time viewed on an individual business basis.

Figure 4.2 illustrates how the operating costs per property of the two corporations has been declining since 1994/95. The councils made small reductions until 1997/98. The increase in operating costs for Sydney Water in 1996/97 was due largely to the commissioning of new filtration plants. The BOO plants were built because higher water quality standards were required of Sydney Water. Costs increased to $76.7 million from $19.6 million in the previous year. Sydney Water has the largest absolute costs. Hunter Water achieved the greatest decrease over the period.

Figure 4.2 Operating costs per property ($97/98)



Source: Annual information returns; consolidated entity view.

The Water Services Association of Australia (WSAA) represents participants in the Australian water industry. Sydney Water, Hunter Water and Gosford Council are members. WSAA publishes comparisons of Australian water businesses, including financial comparisons. One of the measures in the 1998 comparison[10] is combined water and wastewater operating cost per property. The results show an overall downward trend in this ratio for Australian water businesses from 1992/93 onwards, despite a small increase in 1996/97. The 1997 comparison commented that the downward trend is attributed mainly to the results obtained by Sydney Water, the Melbourne water businesses and Brisbane Water. In the survey, the trend for Sydney Water, Hunter Water and Gosford Council is similar to the trend in Figure 4.2 above. In absolute terms, in 1997/98 Sydney Water had the second highest operating costs per property of the 19 businesses examined, while Hunter Water and Gosford Council were marginally below the average.

10 Water Services Association of Australia, *WSAAfacts '98*, 1998.

Over the period and based on these partial measures, the two corporations have achieved increases in efficiency, while the two Councils have maintained their levels.

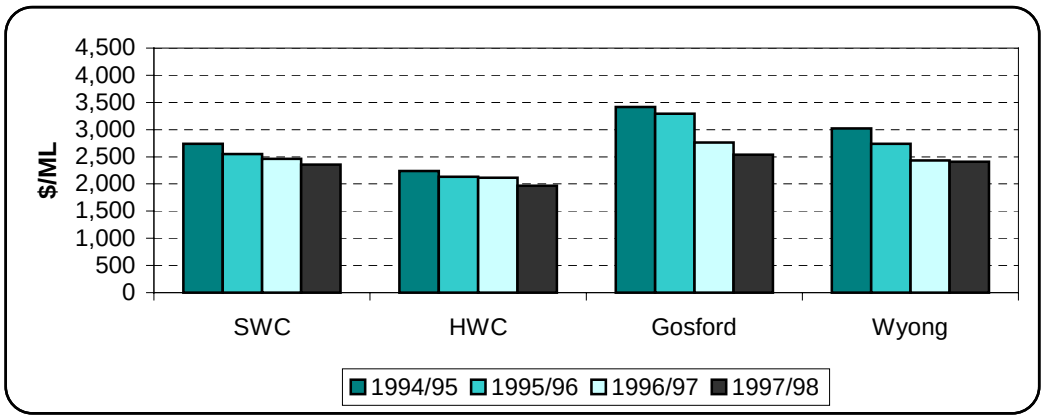
4.1.2 Costs by volume

Another measure of the relative efficiency of the four water businesses is costs per unit of output. Figure 4.3 illustrates the relationship of *total costs to ML of water delivered* for the four water businesses. Figure 4.4 provides a breakdown of the operating costs per ML of water delivered.

Over the period, Sydney Water reduced total costs per ML and operating costs per ML. In 1996/97, Sydney Water recorded a decrease in costs per ML for both ratios. This was due to a large increase in water delivered. Water consumption in eastern Australia for 1996/97 was heavily influenced by the El Nino Southern Oscillation with resulting dry weather patterns. Hunter Water achieved reductions in total costs per ML and in operating costs per ML and had the lowest ratios in absolute terms. Gosford and Wyong Councils achieved large reductions in total costs per ML, driven by reductions in depreciation and returns on capital. This is borne out by the more modest reductions in operating costs per ML for the councils.

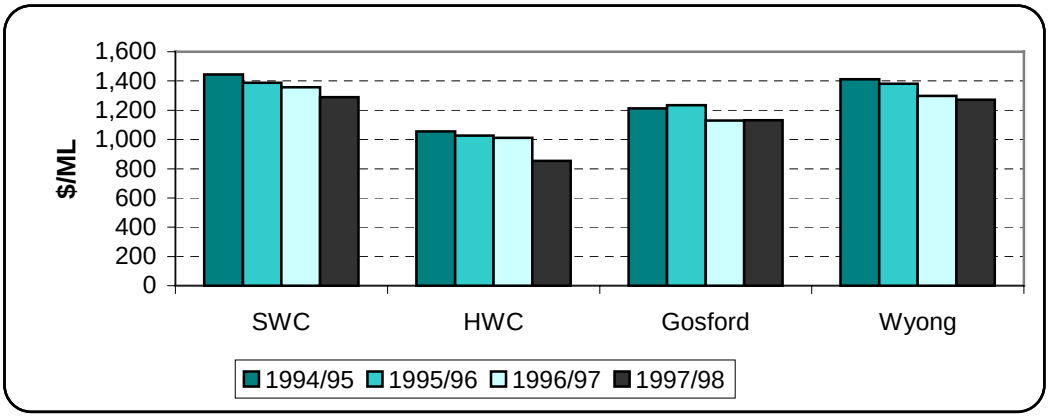
On an operating cost basis, the businesses improved their efficiencies over the period. Sydney Water's figures would have been better without the introduction of BOO plants in 1996/97.

Figure 4.3 Total costs by volume ($97/98 per ML)



Source: Annual information returns; consolidated entity view.

Figure 4.4 Operating costs by volume ($97/98 per ML)



Source: Annual information returns; consolidated entity view.

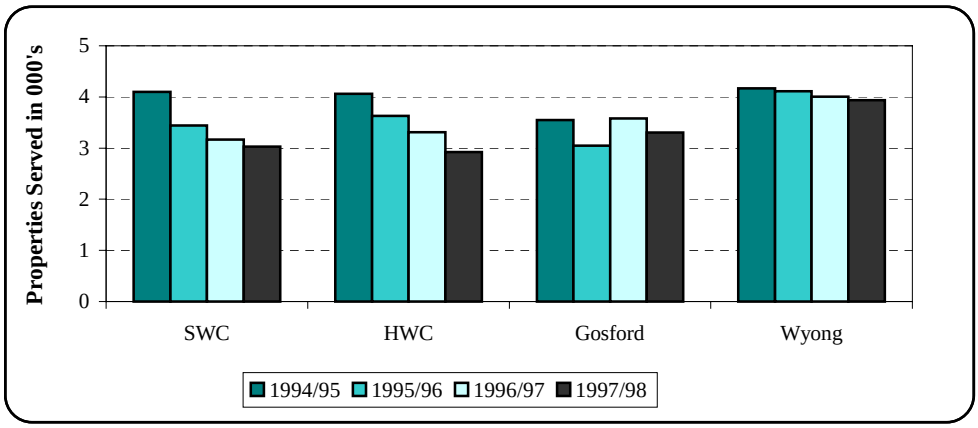
4.2 Partial productivity measures

Overall, the water businesses have improved their cost efficiency in the past five years by reducing their level of cost of service provision. It is important that cost reductions are accompanied by higher productivity.

Information on total factor productivity (ie a measure of the productivity of all factors of production) is preferable, but difficult to obtain. The water businesses' productivity has been gauged by partial measures based on labour factors.

Labour efficiency is measured in Figure 4.5 by comparing numbers of employees to the number of properties serviced. Sydney Water achieved the highest level of improvement. These results arise more from the labour reduction programs of the businesses than the growth in new connections. The variability in Gosford Council's figures reflects problems with allocating joint costs.

Figure 4.5 Total number of employees per 1000 properties served



Source: Annual information returns; consolidated entity view.

Note: All data refers to the total employee numbers for the water businesses including the Corporations' non-regulated businesses. Gosford and Wyong Councils' employee numbers relate to their water and wastewater businesses only.

In most circumstances, contracting out implies a decline in direct employment. Therefore, labour productivity can be understated if the use of consultants and contractors is not examined together with figures for employee numbers. In Table 4.1 labour costs are compared with consulting and contracting costs. Only Hunter Water in 1997/98 shows any notable trend in replacing staff with consultancy services.

Table 4.1 Labour costs and consulting costs (97/98 $)

	1994/95	1995/96	1996/97	1997/98
SWC				
Labour (excluding provisions)	310,777	286,741	239,585	235,527
Consulting, Contracting Services	58,084	35,931	56,240	58,780
HWC				
Labour (excluding provisions)	34,576	31,964	30,370	29,542
Consulting, Contracting Services	5,448	5,761	5,164	9,264
Gosford				
Labour (excluding provisions)	5,791	5,889	6,312	6,658
Consulting, Contracting Services	0	0	1,216	1,269
Wyong				
Labour (excluding provisions)	5,004	6,336	6,989	7,262
Consulting, Contracting Services	505	448	469	718

Source: Annual information returns; consolidated entity view.

Note: Information is from consolidated view of businesses

After advice from Gosford Council ,labour figures for 1996/97 and 1997/98 are taken from Gosford's published annual reports.

These trends should be considered in light of the growth in the businesses' customer base during the same period. All businesses have experienced an annual increase in customers of about 2 per cent since 1992/93. On this basis, the efficiency of the workforces of the corporations has shown continuous improvement because they are servicing more customers for lower costs. Sydney Water, with its sizeable reductions in employee numbers, has significantly improved its labour efficiency. Hunter Water has reduced its employee numbers, but this has been accompanied by an increase in consultancy costs. Gosford Council's figures for labour costs were taken from published annual reports. Gosford council has been making ongoing attempts to accurately allocate the costs of employees working in more than one area of Council.

4.3 Conclusion

The water businesses' total cost per property has been declining steadily in real terms since 1994/95. In real terms, operating costs per property for the corporations have been decreasing at a relatively slower pace than total costs. The councils' operating costs have remained steady. However, when measured on a volume basis, total and operating cost efficiency shows improvement for all water businesses.

Labour productivity has also improved. Sydney Water and Hunter Water particularly have achieved large reductions in their workforces despite strong growth in their customer bases.

The number of employees needed to service every thousand properties is significantly less for the corporations. The falling trend in the use of labour may also be a result of increasingly sophisticated technologies being employed by businesses in the water industry. This is likely to lead to more reliance on capital as an input factor in an industry already considered to be heavily capital intensive.

5 SERVICE STANDARDS

The water businesses have reduced their level of cost of service provision in the past four years. One of the major concerns for the Tribunal is the businesses' ability to maintain the quality of service standards at the same time as reductions in costs and workforce numbers have occurred.

This chapter seeks to assess the quality and standards of services provided by the businesses in the past four years. The focus is on the quality of water and the reliability of the water supply and sewerage systems.

5.1 Regulatory requirements

The Corporations and Councils operate under different regulatory frameworks. This has implications for the quality of service provision of the Corporations and the Councils (a more detailed explanation can be found in the Tribunal's Issues Paper which has been released for the 2000 Medium term Pricing Path). The Environmental Protection Authority (EPA) monitors the environmental performance of all businesses.

The Government has granted the Corporations Operating Licences to provide water, sewerage and some stormwater services to their customers. The Operating Licences set minium operating and customer standards of service for water quality, reliability, pressure and sewage surcharges. The operating licences set targets and outline compliance requirements under other regulators such as the Tribunal, the EPA, Department of Health. All compliance aspects of the operating licences are audited by an independent regulator. The Operating Licence for Sydney Water contains a Customer Contract and the Operating Licence for Hunter Water has a Customer Charter. The customer documents provide the basis for the rights and obligations of customers and of the Corporations.

The Councils do not have Operating Licences. Instead they are required to develop Management Plans under the Local Government Act 1993. This requires that the Councils consult the public on their Draft City Management Plans.

5.2 Water quality

5.2.1 Drinking water

Each water business has water samples tested for the presence of organisms and substances considered a danger to public health. Water quality testing is required to be carried out by the businesses in accordance with respective National Health and Medical Research Council (NHMRC) Guidelines. The water businesses are required to test for a variety of physical, chemical and microbiological conditions of the water samples. For example:

- Physical: colour, turbidity, and temperature
- Chemical: acidity, aluminium, fluoride, manganese and iron
- Microbiology: faecal coliforms[11] which indicate the possible presence of disease-causing organisms.

[11] Organisms which are found in human and animal faeces.

The Department of Health Water Unit regulates for drinking water standards. Although the businesses do not report to the Tribunal on the results of testing, the Tribunal has an interest in their performance in this area because of the requirements of s15 of the IPART Act. This section requires the Tribunal to have regard for the quality, safety and reliability of services. The Tribunal is also concerned about the potential impacts on capital expenditure.

Table 5.1 presents the results of the quality of water indicators of the four businesses over the past four years. Overall, compliance with the standards of drinking water quality was high for those substances tested (although standards for the presence of giardia and cryptosporidium are not part of the NHRMC Guidelines). The four businesses had samples close to 100 per cent of the standard and met respective NHRMC Guidelines. However, the recent water quality problems in the Sydney Water area may see a significant change in the testing, auditing and treatment methods of the businesses.

Table 5.1 shows the businesses' performance against water quality standards (not including standards for cryptosporidium and giardia). All businesses have met the requirements of the respective NHMRC Guidelines.

Table 5.1 Drinking water quality

		Unit	1994/95	1995/96	1996/97	1997/98
Samples that meet minimum requirements of NHMRC Guidelines						
Physical/chemical						
Sydney Water	- Actual	%	98.0	98.8	98.7	99.5
Hunter Water	- Actual	%	96.2	99.5	99.8	99.0
Gosford	- Actual	%	100.0	100.0	100.0	100.0
Wyong	- Actual	%	100.0	99.6	99.7	99.5
Microbiological						
Sydney Water	- Actual	%	95.0	96.9	99.1	99.8
Hunter Water	- Actual	%	96.1	97.9	98.7	99.6
Gosford	- Actual	%	100.0	100.0	100.0	100.0
Wyong	- Actual	%	>99.0	>98.0	>98.6	>97.7

Source: Annual information returns; consolidated entity view.
Note: Compliance figures for the corporations are based on the standards specified in the operating licences.

5.2.2 River water

The NSW Government has introduced a water reform package to address the health and sustainability of NSW rivers. The first stage is to set interim water quality objectives and river flow objectives for NSW rivers. The second stage involves catchment inquiries conducted by the Healthy Rivers Commission. The Commission then recommends environmental standards to Government on water quality, river flows and other aspects of river health. These initiatives are currently progressing.[12]

[12] The Healthy Rivers Commission has released reports for the Hawkesbury-Nepean, Williams, Clarence and Shoalhaven river systems.

In the future, businesses may have to consider the release of water into rivers for environmental flow purposes. This may have significant impacts on capital expenditure. The question arises as to the willingness of customers to pay for these improvements. The benefits of environmental flow regimes not only benefit local residents but the wider community as well. The Tribunal will need to determine how costs are to be spread between local residents and the whole community, and whether other solutions such as demand management initiatives can lessen the impact.

5.3 Reliability of water supply and sewerage systems

The reliability of a water supply system can be measured by the number of interruptions which occur when the water main is shut down for repairs and maintenance. This causes loss of water supply to customers connected to that main.

Reliability for sewerage systems can be measured by the number of incidents of sewage overflow or sewer blockage. This generally results in a sewage spill and prevents appropriate disposal of sewage.

Indicators of system reliability for water and sewerage systems form part of the Tribunal's Annual Information Spreadsheets. The results of these indicators are analysed in the Tribunal's Issues Paper which was published as part of the prices determination process for the 2000 review. There was some variability in the results. Unfortunately, conclusions are difficult to advance because the variability may be due to problems in interpretation of how to measure interruptions. The Tribunal will seek more consistent measures in the next round of Annual Information Returns.

5.4 Conclusion

The trend of performance indicators collected by the Tribunal for the quality of service standards of each water business varied sharply in the five-year period.[13] It is difficult to discern a trend. However, the Licence Regulator has given a generally positive assessment of Sydney Water and Hunter Water performance in audits. The Tribunal will await the finalisation of the new licences for Hunter Water and Sydney Water. The Tribunal expects that these will set future standards.

[13] Please see the Tribunal's Issues Paper for a fuller analysis.

ATTACHMENT 1 FINANCIAL PERFORMANCE OF THE SYDNEY WATER CORPORATION

A1.1 Operating performance

Table A1.1 summarises Sydney Water's financial performance for 1994/95 to 1997/98. In that period, Sydney Water's financial performance in nominal terms features:

- revenue decreasing in early years but a rising trend beginning in 1996/97
- operating expenditure levels increasing overall and following the trend in revenue
- improved profitability as measured by profit before tax and abnormal items
- increasing tax and dividend payments.

Table A1.1 Sydney Water: Financial summary 1994/95 to 1997/98 ($m of the day)

	1994/95	1995/96	1996/97	1997/98	Annual av % change
Total revenue (excluding levy)	1,245	1,142	1,201	1,229	-0.4%
Operating expenditure	657	621	662	672	0.8%
Earning before interest, depn & tax	588	521	539	557	-1.8%
Depreciation	249	167	175	181	-9.9%
Earnings before interest, tax, cap cons	339	354	364	376	3.5%
Interest	194	194	187	175	-3.3%
Operating profit before abnormal items	145	161	177	201	11.3%
Abnormal items	(31)	(7)	32	42	n/a
Operating profit before tax	114	154	209	242	28.3%
Tax equivalent	42	93	99	127	43.8%
Operating profit after tax before cap cons	72	60	110	116	17.0%
Dividends	63	40	78	209	48.2%

Source: Annual information returns; consolidated entity view.

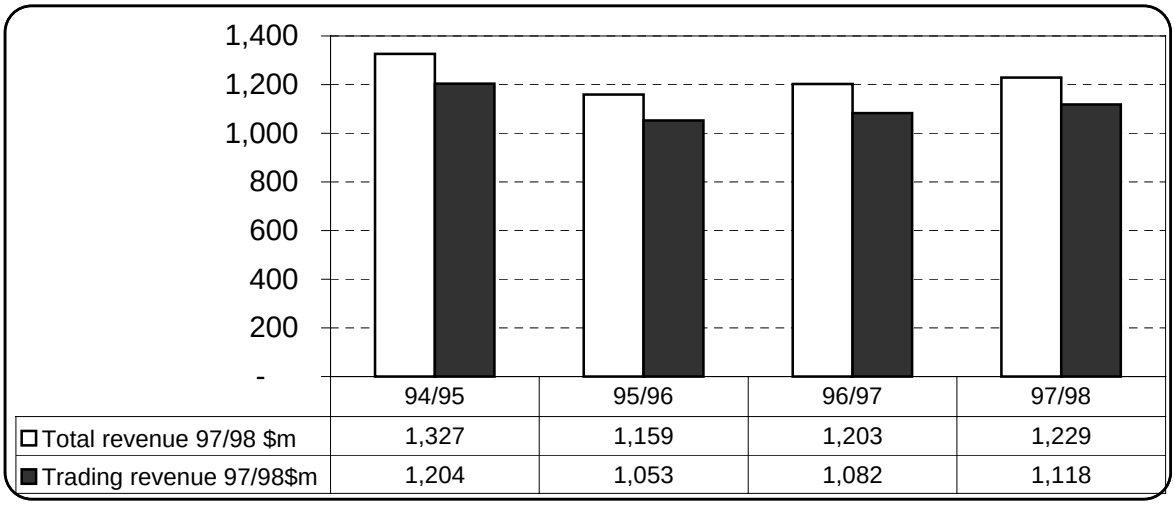
A1.1.1 Revenue

Figure A1.1 shows the level of revenue for Sydney Water in real terms from 1994/95 to 1997/98. This shows:

- total revenue decreasing by 7 per cent in real terms (while inflation increased by 7 per cent)
- revenue levels increasing after the Tribunal's medium term price determination in 1996 and the lifting of water restrictions in October 1996
- a significant change occurring in the mix of revenue with a reduction in the property value based component of charges. All residential property charges were removed in October 1995. The Tribunal determined in 1996 that the property value based component of non-residential pricing be reduced over the four years from 1996/97 by a

further $80 million. In the mid term review of 1998, the Tribunal accelerated the reform with an additional reduction of $20 million per year for years 1998/99 and 1999/2000.

Figure A1.1 Sydney Water: Revenue (97/98 $m)



	94/95	95/96	96/97	97/98
Total revenue 97/98 $m	1,327	1,159	1,203	1,229
Trading revenue 97/98$m	1,204	1,053	1,082	1,118

Source: Annual information returns; consolidated entity view.

A1.1.2 Expenditure

Table A1.2 below shows the movement in operating costs in real terms (1997/98 $) for the four year period from 1994/95.

- Labour costs show a continual downward trend with the decline in employee numbers. Total operating costs and total expenditure (which includes depreciation) began to increase in 1996/97 after some years of decline. Over the period, operating costs decreased by 4 per cent and total expenditure by 12 per cent.
- Depreciation has reduced by 32 per cent. Depreciation was particularly influenced by a change in asset valuation methodology from indexed historical cost to written down current replacement cost in 1994/95. A review of the useful lives of water mains, waste water mains and stormwater drains in 1995/96 resulted in a decrease in depreciation charges of $78 million.

Table A1.2 Sydney Water: Operating cost trends (1997/1998 $m)

	1994/95	1995/96	1996/97	1997/98	Annual Av % change
Labour (excl employee provisions)	311	287	240	236	-8.7%
Consultants	6	4	5	6	0.6%
Hire & contract services	52	32	52	53	0.4%
Materials	52	37	39	32	-14.8%
Energy	41	29	25	21	-19.4%
Licence fees	18	18	23	23	8.2%
BOO costs	-	20	77	87	-
Other (excl. WDV asset disposal)	108	103	127	127	5.3%
Sales tax, land tax & stamp duties	12	16	17	24	25.1%
Employee provisions	74	58	35	30	-25.9%
Other provisions	25	27	24	34	10.0%
Total operating cost	700	631	663	672	-1.3%
Depreciation	266	169	175	181	-11.8%
Interest (incl loan guarantee fees)	206	196	188	175	-5.3%
Total expenditure	1,172	996	1,026	1,029	-4.2%
Employee numbers (full time equivalent)	5,965	5,099	4,763	4,629	-8.0%

Source: Annual information returns; consolidated entity view.

A1.2 Debt position and credit rating position

Table A1.3 shows the relationship between debt and investments, and Sydney Water's ability to pay debt principle, interest payments and capital expenditure. The ratios are calculated using the definitions in Attachment 5.

- Reserves of cash and investments increased from $561 million in 1994/95 to $769 million in 1996/97. In 1997/98, increases in dividend payments influenced a reduction to $657 million. Sydney Water's build up of cash may signal an expectation of greater capital expenditure in the future to meet evolving environmental standards. There is some evidence of this with greater capital expenditure in 1997/98 (see A1.4 Capital expenditure).
- Debt levels have remained stable and relatively low.
- Steady debt levels against varying cashflows produce a varying *funds flow net debt payback* ratio (ability to repay debt). Nonetheless, under this cashflow measure, Sydney Water's ability to repay debt is strong.
- The *internal financing* ratio (the need to borrow to fund capital expenditure) is generally strong. However, greater dividend requirements and higher capital expenditure in 1997/98 may signal greater pressure for external borrowing in the near future.
- Two measures determine Sydney Water's ability to pay interest costs, one based on cashflow and the other based on profit. The cash based ratio *funds flow interest cover* generally reveals an increasing ability from 1996/97 onwards due to increasing revenues. The profit based ratio *pre-tax interest coverage* shows a similar increasing trend. The driver of this trend is the turn around in revenue from 1996/97 onwards.

Broadly, funds flow on an annual basis is positive over the period, decreasing in the early years until a turn around in 1996/97. With debt levels remaining steady, cash flow ratios follow that trend because of the influence of the trend in revenue. However, the ratios by themselves do not clearly show the accumulation of cash by Sydney Water. This highlights the need to survey a variety of indicators when assessing performance.

Table A1.3 Sydney Water: Debt and credit analysis ($m)

	1994/95	1995/96	1996/97	1997/98
Financial ratios on revalued asset basis				
Pre-tax interest coverage	1.9	2.1	2.3	2.5
Total debt/Total capital	0.14	0.15	0.14	0.14
Debt and cash position				
Gross debt level (inc overdraft)	1,819	1,836	1,831	1,824
Total cash & investment (ST & LT)	561	662	769	657
Net debt/(cash)	1,258	1,174	1,062	1,167
Credit rating ratios & analysis				
Funds flow interest coverage	3.6	3.2	3.6	3.9
Funds flow net debt payback	3.6	5.1	4.2	4.6
Internal financing ratio	1.2	1.2	1.7	0.3

Source: Annual information returns; consolidated entity view.

Some of the ratios of Table A1.3 can also be used to estimate the credit rating of an organisation. Rating agencies publish information on this basis. The last two columns of Table A1.4 show the results that must be achieved for an organisation with an excellent risk profile to obtain either an AAA or A rating. The NSW Treasury regards the A rating to be the minimum rating appropriate for a government trading enterprise.[14] Sydney Water achieves at least an A rating except for internal financing ability. There was a turnaround in this ratio in 1997/98 because of greater dividend and capital expenditure requirements.

Table A1.4 Sydney Water: Credit rating for 1997/98

	SWC	AAA	A
Funds flow interest coverage	3.9	4.0	2.8
Internal financing ratio	0.3	1.0	0.6
Funds flow net debt payback	4.6	4.0	9.0

Source: Annual information returns; consolidated entity view.

A1.3 Cashflow analysis

Table A1.5 shows the significant cashflow items for Sydney Water for 1994/95 to 1997/98.

- The c*ashflow from operating activities* figure shows how successful Sydney Water has been in controlling its core operations. This figure was declining (but nonetheless positive) in the early years but began to increase in 1997/98.

[14] NSW Treasury, *Capital Structure Policy for NSW Trading Enterprises*, August 1994, p iii.

- In nominal terms, payments to suppliers and employees and receipts from customers have remained relatively steady within annual variations.
- Payments to government of tax and dividends have steadily increased with a large increase in 1997/98.
- The positive cashflow has seen the continuing strong relationship between investments and borrowings.

Table A1.5 Sydney Water: Significant cashflow items ($m)

	1994/95	1995/96	1996/97	1997/98
Receipts from customers	1,218	1,105	1,144	1,207
Payments to suppliers & employees	(671)	(634)	(665)	(680)
Other	(206)	(193)	(250)	(231)
Cash flow from operating activities	341	278	229	296
Payments for plant & equipment	(346)	(199)	(166)	(316)
Proceeds from borrowing	14	118	16	16
Loan repayment	(21)	(118)	(20)	(19)
Notional tax paid to govt	(60)	(48)	(113)	(95)
Dividend paid	(57)	(63)	(40)	(146)
Other	232	123	115	167
Net increase/(decrease)	103	91	21	(97)
Cash at end of year	329	419	440	343

Source: Annual information returns; consolidated entity view.

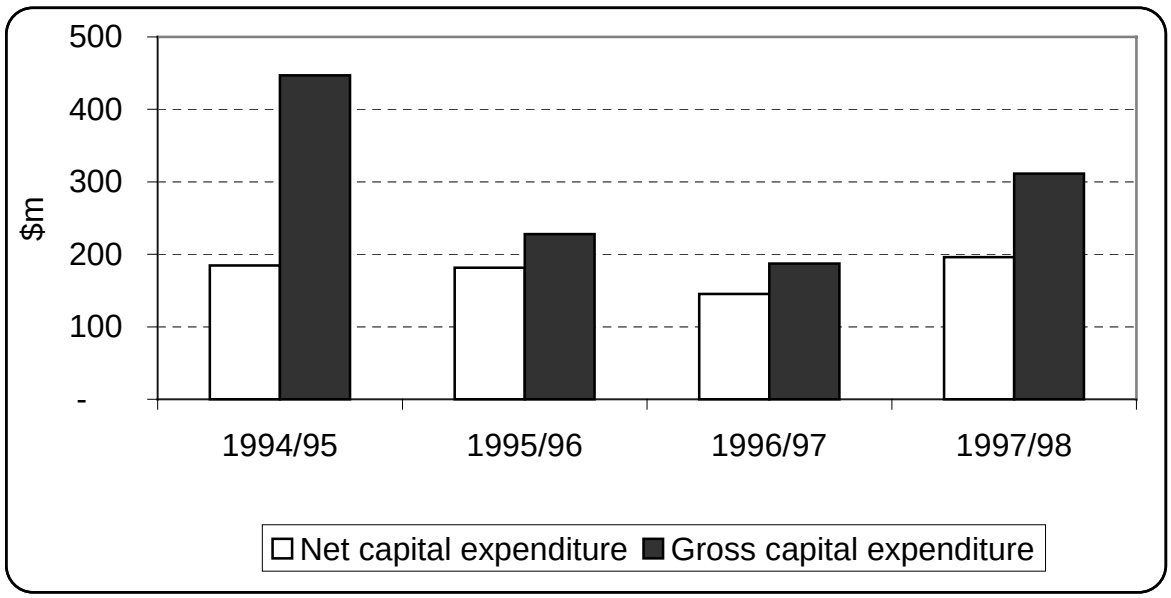
A1.4 Capital expenditure

The provision of water and sewerage services is highly capital intensive. Therefore capital expenditure for water infrastructure forms a significant proportion of the water businesses' cash outlays. Capital expenditure serves a variety of purposes. Expenditure may be required to replace existing assets without increasing the service capacity of the system (replacement capital expenditure), or it may be required to enlarge the capacity of the system (new capital expenditure). Expenditure on assets can be provided by entities outside the water business with ownership of the assets still residing with the water business. These are known as 'free' or customer-funded assets. New facilities can be provided when water businesses enter into arrangements for the private sector to design, build, finance, own, operate and maintain infrastructure while the water business pays periodic tariffs to the private sector entity. These are known as BOO projects.

Figure A1.2 shows the movement in capital expenditure for Sydney Water. The graph shows expenditure excluding and including values for free assets.

- Expenditure on capital items by Sydney Water (net capital expenditure) steadily decreased over the period to 1996/97 enabling a build-up of cash and investment levels.
- Capital expenditure began to increase in 1997/98. Some of this increase is due to expenditure on the Northside Storage Tunnel.

Figure A1.2 Sydney Water: Capital expenditure ($m) trend



Source: Annual information returns; consolidated entity view.

Reductions in capital expenditure can have various implications. They may reflect:

- under investment in the current period or over investment in the past
- a shift to maintenance expenditure instead of capital expenditure
- deferment of capital expenditure programs
- the position of the organisation in its investment cycle.

The Tribunal is conducting a capital expenditure review of Sydney Water for the medium term price path determination in 2000. This will help the Tribunal to determine price levels necessary for future capital expenditure requirements.

In an organisation, several drivers determine the methods of funding expenditure. The Tribunal takes those drivers into account when determining price levels. In its submission to the 1998 mid-term review of the 1996 medium term price path, Sydney Water commented that it would be able to finance construction of the Northside Storage Tunnel without additional external borrowing. However, a change in State Government dividend policy in 1997/98 has substantially increased the level of distributions required by Government. This may place pressure on Sydney Water's current funding arrangements.

A1.5 Conclusion

Sydney Water's financial performance over the period 1994/95 to 1997/98 is characterised by:

- decreasing real and nominal revenue in line with containment of prices until a turnaround in 1996/97 (due to the medium term price path in 1996 and the drought conditions in 1997)
- decreasing operating expenditure levels with staff costs decreasing in line with reductions in staff numbers

- decreasing asset values influenced by a change of policy in 1994/95
- debt levels keeping constant with positive cashflows directed to a build up of cash
- decreasing capital expenditure until 1997/98 when expenditure on the Northside Storage Tunnel commenced
- on a cashflow basis, a healthy financial position when compared with entities in both the public and private sector
- a change in Government dividend policy which may place pressure on funding borrowing levels.

Sydney Water is in a sound financial position. Measurements based on cashflow show Sydney Water is well able to meet its current commitments. However future capital expenditure requirements and reduced demand for water may see Sydney Water's position put under pressure.

Price determinations have resulted in a restructuring of Sydney Water's tariffs leading to reductions in revenue in real terms. Nonetheless, Sydney Water has continued to produce positive cashflows. Capital expenditure levels are low in the early years, but increase in 1997/98. Sydney Water has maintained its debt levels and built up levels of cash and investments. The intention of this build up may be to finance future cash outlays such as employee entitlement obligations or capital projects. The implications of the lower levels of capital expenditure were reviewed in the mid term pricing review of Sydney Water conducted by the Tribunal in June 1998. Sydney Water commented that its capital expenditure program will accelerate in 1998/99 and 1999/2000. There is some evidence of this with higher capital expenditure in 1997/98. The Tribunal did not amend the price path on this basis, but will closely examine capital expenditure at the next major pricing review in 2000.

ATTACHMENT 2 FINANCIAL PERFORMANCE OF THE HUNTER WATER CORPORATION

A2.1 Operating performance

In the period 1994/95 to 1997/98, Hunter Water's financial performance in nominal terms is characterised by:

- variable revenue and operating expenditure
- strong profit levels, measured before or after depreciation and interest
- increasing dividend payments to government.

Table A2.1 Hunter Water: Financial summary 1994/95 to 1997/98 ($m)

	1994/95	1995/96	1996/97	1997/98	Annual av. % change
Total revenue	130	129	135	130	0.0%
Operating expenditure	61	62	65	56	-2.7%
Earning before int,tax, depn, abnormals	69	67	71	74	2.3%
Depreciation	39	28	28	27	-10.7%
Earnings before int, tax, abnormals	30	39	43	46	15.1%
Interest	11	7	7	7	-13.8%
Operating profit before abnormal items	19	33	36	39	26.5%
Abnormal items	-	-	18	4	-
Profit before tax (excluding envir. levy)	19	33	54	44	31.0%
Tax equivalent	14	16	12	7	-18.8%
Operating profit after tax	5	17	42	36	89.0%
Dividends	17	30	36	39	30.5%

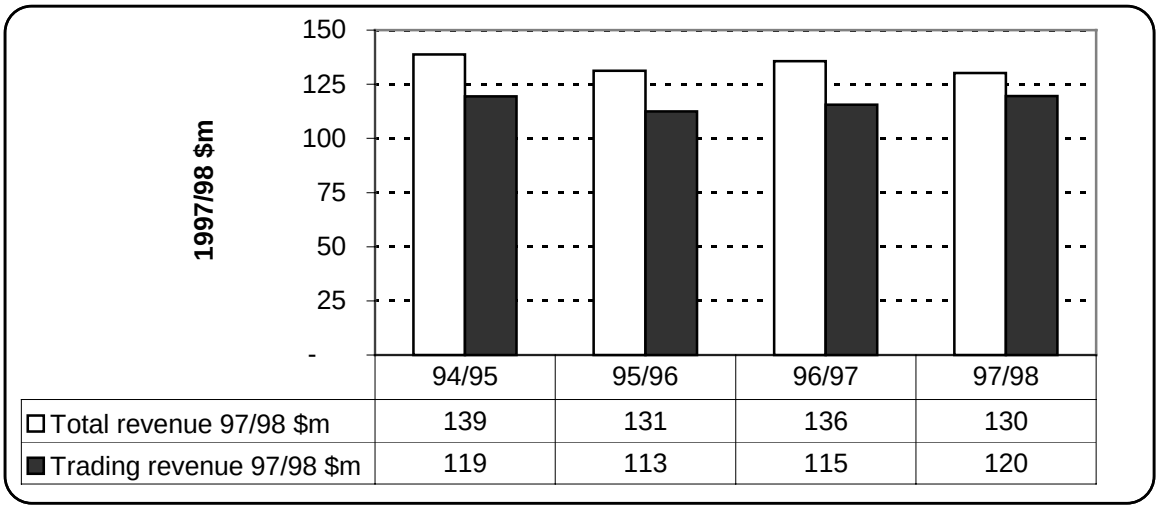
Source: Annual information returns; consolidated entity view.

A2.1.1 Revenue

Figure A2.1 shows the trend in revenue in real terms.

- During the period 1994/95 to 1997/98 there was an overall reduction of 7 per cent in total revenue in real terms. Hunter Water has been pro-active in adopting a user pays system of charging. The previous property value based method of residential charging was abandoned before the period of this report.
- In the 1996/97 year, Hunter Water adopted changes to its accounting methods for external reporting purposes. Accrual of revenue from unread meters (ie water consumed but not billed) was recorded as an abnormal item. Assets and capital contributions received from developers were recorded as revenue. To enable more accurate trend analysis, these changes do not form part of the revenue in Figure A2.1.

Figure A2.1 Hunter Water: Revenue (97/98 $m)



	94/95	95/96	96/97	97/98
Total revenue 97/98 $m	139	131	136	130
Trading revenue 97/98 $m	119	113	115	120

Source: Annual information returns; consolidated entity view.

A2.1.2 Expenditure

Table A2.2 shows the movement in real terms for operating expenditure items.

- Total expenditure over the period shows a decrease of 23 per cent. The decrease in operating cost is 14 per cent. Contractions in labour and material costs have been offset by increases in 'other' expenditures. Employee costs (labour and employee provisions) reduced by 14 per cent.
- The main drivers of the reduction in total expenditure are depreciation expenses and interest expenses. Depreciation reduced significantly in 1995/96 as a result of a revaluation of major infrastructure assets and a review of asset lives. The decline in interest expense, along with reduced financing costs, reflects the reduction in gross debt over the period.

Table A2.2 Hunter Water: Cost trends (1997/98 $m)

	1994/95	1995/96	1996/97	1997/98	Annual av. % change
Labour (excl employee provisions)	35	32	30	30	-5.1%
Consultants	1	1	1	1	-3.2%
Hire & contract services	4	5	4	8	24.1%
Materials	9	8	8	8	-2.4%
Energy	6	5	5	5	-4.8%
Licence fees	0	0	0	0	-5.0%
BOO costs	-	-	-	-	n/a
Other	7	6	13	1	-53.0%
Sales tax, land tax & stamp duties	0	1	0	0	118.6%
Employee provisions	3	4	3	3	-1.4%
Operating cost	65	63	65	56	-4.7%
Depreciation	41	28	28	27	-12.5%
Interest (incl loan guarantee fees)	12	7	7	7	-15.6%
Total expenditure	118	98	100	91	-8.3%
Employee nos. (full time equivalent)	770	720	620	555	-10.2%

Source: Annual information returns; consolidated entity view.

A2.2 Debt position and credit rating position

Table A2.3 shows the relationship between debt and investments, and Hunter Water's ability to pay debt principle, interest payments and capital expenditure. The ratios are calculated using the definitions in Attachment 5.

- From 1994/95 to 1997/98 the net debt position (debt less cash and investments) moved from an excess of debt to an excess of cash
- Debt has been contained with increasing cashflows, therefore both measures used to determine ability to repay interest (*funds flow interest coverage* and *pre tax interest coverage*) are very strong.
- Similarly, the number of years needed to repay debt (*funds flow net debt payback*) has reduced from 0.7 to less than zero (ie investments exceed debt).
- The ability to pay for capital expenditure with internal funds (Internal financing ratio) as opposed to external borrowings, is strong. In 1996/97 very low purchases of property, plant and equipment result in a high ratio. Higher dividend payments in 1997/98 reduced funds flow and reduced the ratio.
- Broadly, strengthening cashflows from operations combined with capital expenditure reductions have enabled steady debt levels as well as a build up of cash reserves.

Table A2.3 Hunter Water: Debt and credit analysis ($m)

	1994/95	1995/96	1996/97	1997/98
Financial ratios on revalued asset basis				
Pre-tax interest coverage	3.9	23.0	46.9	37.1
Total debt/Total capital	5%	5%	4%	4%
Debt and cash position				
Gross debt level (inc overdraft)	85	86	85	84
Total cash & investment (ST & LT)	56	85	117	105
Net debt/(cash)	29	1	(31)	(21)
Credit Rating Ratios & Analysis				
Funds flow interest coverage	9.6	41.5	82.5	62.1
Funds flow net debt payback	0.7	0.0	-0.6	-0.4
Internal financing ratio	1.3	1.1	2.7	0.8

Source: Annual information returns; consolidated entity view.

Table A2.4 shows Hunter Water's credit profile in 1997/98. Hunter Water would be rated at a minimum of grade A for all measures under these indicators.

Table A2.4 Hunter Water: Credit rating for 1997/98

	HWC	AAA	A
Funds flow interest coverage	62.1	4.0	2.8
Internal financing ratio	0.8	1.0	0.6
Funds flow net debt payback	-0.4	4.0	9.0

Source: Annual information returns; consolidated entity view.

A2.3 Cashflow analysis

Table A2.5 records the details of the movements of significant cashflow items.

- Cashflows from operations are positive and strong.
- Loan repayments and proceeds from borrowing decline in later years, reflecting the maintenance of debt levels.
- Tax and dividend payments to government have increased.

Table A2.5 Hunter Water: Significant cashflow items ($m)

	1994/95	1995/96	1996/97	1997/98
Receipts from customers	126	116	129	120
Payments to suppliers & employees	(62)	(60)	(62)	(58)
Other	(8)	(1)	(5)	(16)
Cash flow from operating activities	56	56	62	46
Payments for plant & equipment	(33)	(26)	(17)	(37)
Proceeds from borrowing	53	108	0	-
Loan repayment	(127)	(109)	3	(1)
Notional tax paid to govt	-	-	(4)	(15)
Dividend paid	(12)	(17)	(30)	(36)
Other	18	17	17	31
Net increase/(decrease)	(44)	28	32	(11)
Cash at end of year	56	84	116	104

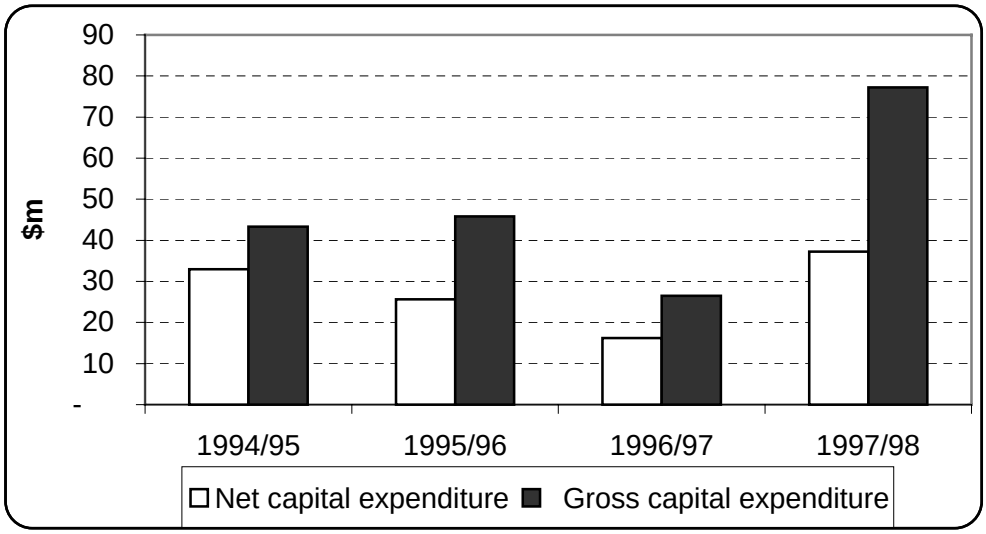
Source: Annual information returns; consolidated entity view.

A2.4 Capital expenditure

Figure A2.2 shows the movement in Hunter Water's capital expenditure on a net and a gross basis. Gross capital expenditure includes a value for free assets (ie assets passed to Hunter Water by developers without cost to Hunter Water). Net capital expenditure reduced from a high of $33m in 1994/95 to $16m in 1996/97, and then jumped to $37m in 1997/98

At the mid term review in 1998, Hunter Water commented that the slow down in capital expenditure was due to delays and deferments caused by environmental priorities. Hunter Water had expected an acceleration in expenditure for 1998/99 and 1999/2000. The jump in expenditures in 1997/98 may be the first sign of that acceleration. Hunter Water reports that the increase in expenditure in free assets in 1997/98 was a result of spending on sewerage treatment plants for the Hunter Sewerage Project. Net capital expenditure also increased that year due to spending on the Shortland waste water treatment plant and the Cardiff carrier main.

Figure A2.2 Hunter Water: Capital expenditure ($m)



Source: Annual information returns; consolidated entity view.

A2.5 Conclusion

The main characteristics of Hunter Water's performance over the five year period are:

- a very strong financial position overall
- decreasing revenue and operating expenditure in real terms but no significant, consequential effect on cashflows
- increasing profit on an after depreciation and interest basis
- increasing tax and dividend payments to government
- an improving and very strong net debt position
- a high credit rating.

The period from 1994/95 to 1997/98 has seen Hunter Water achieve an increasingly strong financial position. However, the closure of the BHP operations in Newcastle will have a significant impact on future revenues. Funds from operations have shown strong growth. Debt levels have been maintained and interest expense has been reduced. Capital expenditure was restrained until a turn around in 1997/98. This has allowed Hunter Water to consistently increase its returns to its shareholders.

Customers are better off as a result of price constraint. However, the Tribunal is concerned about the low levels of net capital expenditure to 1996/97 and what implications this may have. The Tribunal will closely examine capital expenditure levels and the methods used for forecasting capital expenditure at the next major pricing review in 2000.

ATTACHMENT 3 FINANCIAL PERFORMANCE OF WATER & SEWERAGE OPERATIONS OF GOSFORD CITY COUNCIL

In 1992/93 legislative changes were introduced which affect Gosford and Wyong Councils. They came about through the passing of the *Local Government Act, 1993*, the introduction of the Local Government Code of Accounting Practice and Financial Reporting, and the initial application of Australian Accounting Standard (AAS 27) *Financial Reporting by Local Governments*. This has led to major changes in the way the councils are required to report their financial performance.

The major practical implications are:

- the adoption of full accrual accounting
- the capitalisation of all infrastructure assets (including those which had been expensed previously)
- the recognition of capital contributions in the profit and loss account.

Asset recognition and capitalisation have been introduced progressively. For statutory purposes, the valuation methodology is on a current cost basis.

A3.1 Operating performance

In the period 1994/95 to 1997/98, Gosford Council's financial performance features:

- reducing revenue
- increasing operating expenditure
- increasing earnings before tax due mainly to reductions in interest, and depreciation expenses.

Table A3.1 Gosford Council: Financial summary 1994/95 to 1997/98 ($m)

	1994/95	1995/96	1996/97	1997/98	Annual av % change
Total revenue	49	47	43	43	-3.9%
Operating expenditure	17	18	18	19	3.6%
Earning before interest, depn & tax	31	29	25	24	-8.6%
Depreciation	15	12	9	10	-13.5%
Abnormal items	-	-	-	-	0.0%
Earning before interest & tax	16	18	16	14	-4.5%
Interest	12	10	9	7	-14.1%
Profit before tax	5	8	8	7	13.7%
Profit after tax before cap cons	5	8	8	7	13.7%

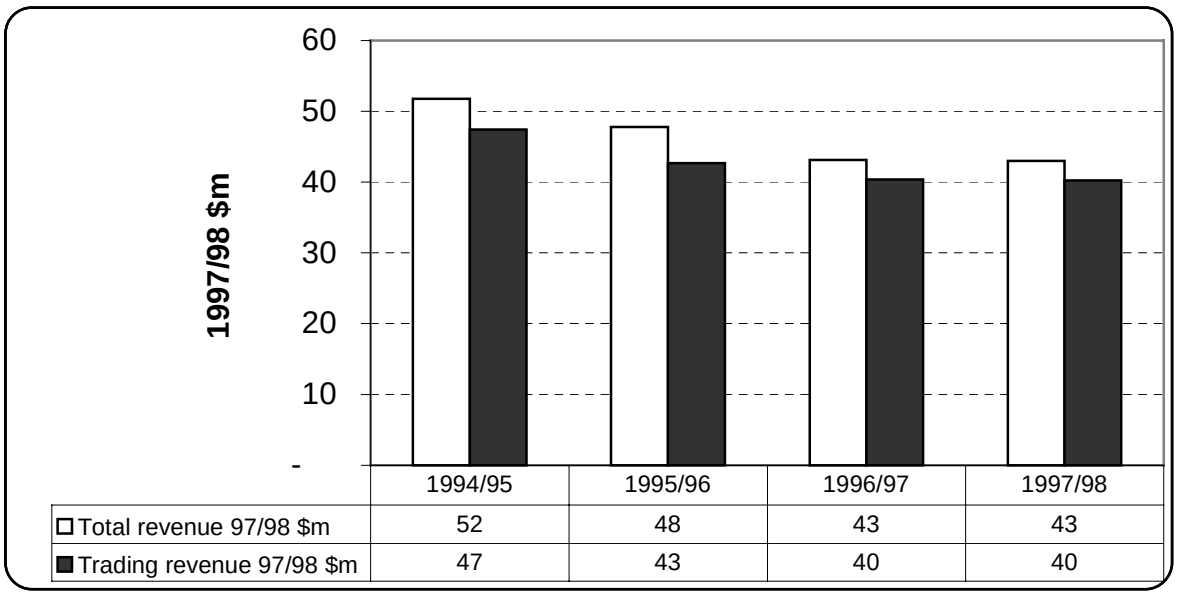
Source: Annual information returns; consolidated entity view.

A3.1.1Revenue

Figure A3.1 shows that, in real terms:

- Gosford Council's total revenue (which includes all revenue such as interest received on investments) decreased by 15 per cent from 1994/95 to 1997/98. In the same period, trading revenue decreased by 14 per cent.

Figure A3.1 Gosford Council: Revenue (97/98 $m)



	1994/95	1995/96	1996/97	1997/98
Total revenue 97/98 $m	52	48	43	43
Trading revenue 97/98 $m	47	43	40	40

Source: Annual information returns; consolidated entity view.

A3.1.2Expenditure

Table A3.2 shows operating expenditures for Gosford Council.

- Total expenditure (in real terms) reduced on annual average by 8 per cent. This has been driven by lower depreciation and interest charges.
- Depreciation shows an annual average percentage decrease of 15 per cent. Similarly, interest shows an average annual percentage decrease of 16 per cent. Asset values have increased in line with revaluations.
- Operating costs for core activities have remained constant with labour costs sitting at around $6m annually.

Table A3.2 Gosford Council: Cost trends (1997/98 $m)

	1994/95	1995/96	1996/97	1997/98	Annual av % change
Labour (excl employee provisions)	6	6	6	7	6.9%
Consultants	-	-	-	-	n/a
Hire & contract services	-	-	1	1	n/a
Materials	-	3	2	1	n/a
Energy	2	2	2	2	-8.3%
Licence fees	0	0	0	0	-30.3%
BOO costs	-	-	-	-	n/a
Other	10	6	6	6	-15.6%
Sales tax, land tax & stamp duties	-	-	-	-	n/a
Employee provisions	0	1	1	1	50.2%
Operating cost - core activities	18	18	18	19	1.4%
Depreciation	16	12	9	10	-15.3%
Interest (incl loan guarantee fees)	12	10	9	7	-15.9%
Total expenditure	47	40	35	36	-8.1%
Employee nos. (full-time equivalent)	205	179	217	203	-0.3%

Source: Annual information returns; consolidated entity view.

Note: After advice from Gosford Council ,labour figures for 1996/97 and 1997/98 are taken from Gosford's published annual reports.

A3.2 Debt position and credit rating position

Table A3.3 shows the relationship between debt and investments, and Gosford Council's ability to pay debt principle, interest payments and capital expenditure. The ratios are calculated using the definitions in Attachment 5.

- The most significant trend in Gosford Council's debt and credit rating positions is the decrease in gross debt levels from $122m in 1994/95 to $80m in 1997/98, a decrease of 34 per cent. Total cash and investments increased consistently over the period resulting in the net debt position improving by 52 per cent.
- The number of years required to repay debt (*funds flow net debt payback*) has decreased consistently.
- The ability to repay interest on a funds basis (*funds flow interest coverage*) and on a profit basis (*pre-tax interest coverage*) shows continuing strength.
- The ability to fund capital expenditure without borrowing (*internal financing ratio*) is strong. Expenditure on property, plant and equipment was less than $1m for 1994/95 and 1995/96 resulting in abnormally high ratios.

Table A3.3 Gosford Council: Debt and credit analysis ($m)

	1994/95	1995/96	1996/97	1997/98
Financial ratios on revalued asset basis				
Pre-tax interest coverage	1.5	2.0	2.3	2.4
Total debt /Total capital	38%	22%	16%	14%
Debt and cash position				
Gross debt level (inc overdraft)	122	108	94	80
Total cash & investment (ST & LT)	29	32	34	36
Net debt/(cash)	93	76	59	44
Credit Rating Ratios & Analysis				
Funds flow interest coverage	3.0	3.4	3.7	4.3
Funds flow net debt payback	4.7	3.9	3.5	2.7
Internal financing ratio	21.7	17.4	3.6	6.1

Source: Annual information returns; consolidated entity view.

Table A3.4 reveals a measure of Gosford's credit rating. Gosford would achieve a credit rating level of AAA on all measures.

Table A3.4 Gosford Council: Credit rating for 1997/98

	Gosford	AAA	A
Funds flow interest coverage	4.3	4.0	2.8
Internal financing ratio	6.1	1.0	0.6
Funds flow net debt payback	2.7	4.0	9.0

Source: Annual information returns; consolidated entity view.

A3.3 Cashflow analysis

Gosford and Wyong Councils were not obliged to produce cashflow statements for the water and sewerage areas of their businesses for external reporting purposes. Wyong Council did so for the first time in 1997/98. Most of the statements in this report have been constructed by council officers within the limits of the historical information available.

Table A3.5 records the details of the movements of significant cashflow items.

- Gosford's management of cash over the five years sees positive cashflows directed towards retiring debt. There are no new borrowings, only repayments.
- Payments for property, plant and equipment have shown some increase.
- A positive indicator of Gosford's liquidity position is the improving excess of current assets over current liabilities.

Table A3.5 Gosford Council: Significant cashflow items ($m)

	1994/95	1995/96	1996/97	1997/98
Receipts from customers	44	43	37	40
Payments to suppliers & employe	(19)	(17)	(17)	(16)
Other	(7)	(8)	(7)	(5)
Cash flow from operating activitie	18	17	13	20
Payments for plant & equipment	(1)	(1)	(5)	(3)
Proceeds from borrowing	-	-	-	-
Loan repayment	(18)	(15)	(14)	(14)
Notional tax paid to govt	-	-	-	-
Dividend paid	-	-	-	-
Other	3	6	4	2
Net increase/(decrease)	3	7	(2)	5
Cash at end of year	29	36	27	14
Current assets less current liabilit	21	23	24	27

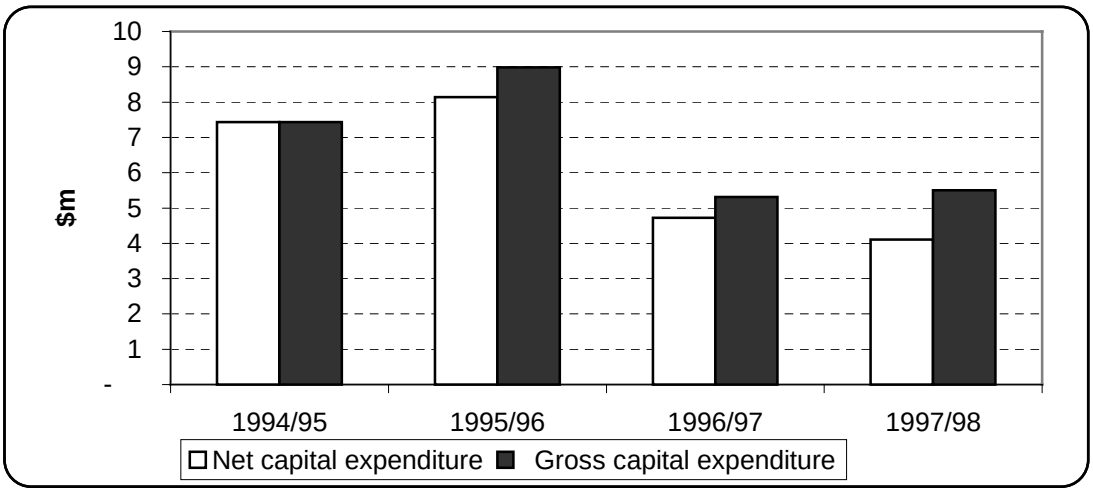
Source: Annual information returns; consolidated entity view.

A3.4 Capital expenditure

Figure A3.2 shows the movement in capital expenditure for Gosford Council. The graph shows expenditure excluding and including values for free assets.

- Gosford Council's net capital expenditure declined in the last two years of the survey.
- The value for free assets (the difference between net and gross capital expenditure) is low, reflecting the low level of development in the Gosford area.

Figure A3.2 Gosford Council: Capital expenditure ($m)



Source: Annual information returns; consolidated entity view.

A3.5 Conclusion

Gosford Council's financial performance is characterised by:

- decreasing revenue in real terms under the prices set by the Tribunal
- steady earnings before tax due mainly to reducing interest and depreciation expenses
- decreasing net debt
- strong cashflows.

Gosford Council has enjoyed positive cashflows and used these to retire debt. This has led to reducing interest costs which, along with reductions in depreciation arising from asset life adjustments, has meant consistent profitability. The combination of strong cashflows, reducing debt levels and a good credit rating places Gosford in a healthy financial position.

ATTACHMENT 4 FINANCIAL PERFORMANCE OF WATER & SEWERAGE OPERATIONS OF WYONG SHIRE COUNCIL

Wyong Shire Council's methods of financial reporting have been affected by the same legislative and accounting changes mentioned in reviewing Gosford City Council.

The information supplied by Wyong Shire Council in the Annual Information Returns to the Tribunal varies somewhat from the information in Council's published Annual General Purpose Financial Reports due to some differences in definitions. The analysis in this section relies on the Annual Information Returns.

A4.1 Operating performance

Table A4.1 summarises the financial performance of Wyong Shire Council for the period 1994/95 to 1997/98 in nominal terms. The main features of that performance are:

- steady revenue levels
- increasing operating expenditure
- decreasing interest payments
- solid earnings after depreciation and interest.

Table A4.1 Wyong Council: Financial performance summary ($m)

	1994/95	1995/96	1996/97	1997/98	Annual av. % change
Total revenue	36	35	33	36	-0.5%
Operating expenditure	17	18	18	19	3.5%
Earning before interest, depn & tax	19	17	16	17	-4.4%
Depreciation	9	9	10	10	1.9%
Abnormal items	-	-	-	(5)	0.0%
Earning before interest & tax	10	9	6	12	5.8%
Interest	6	5	5	4	-14.7%
Profit before tax	4	3	1	8	28.4%
Tax equivalent	-	-	-	-	n/a
Profit after tax before cap cons	4	3	1	8	28.4%

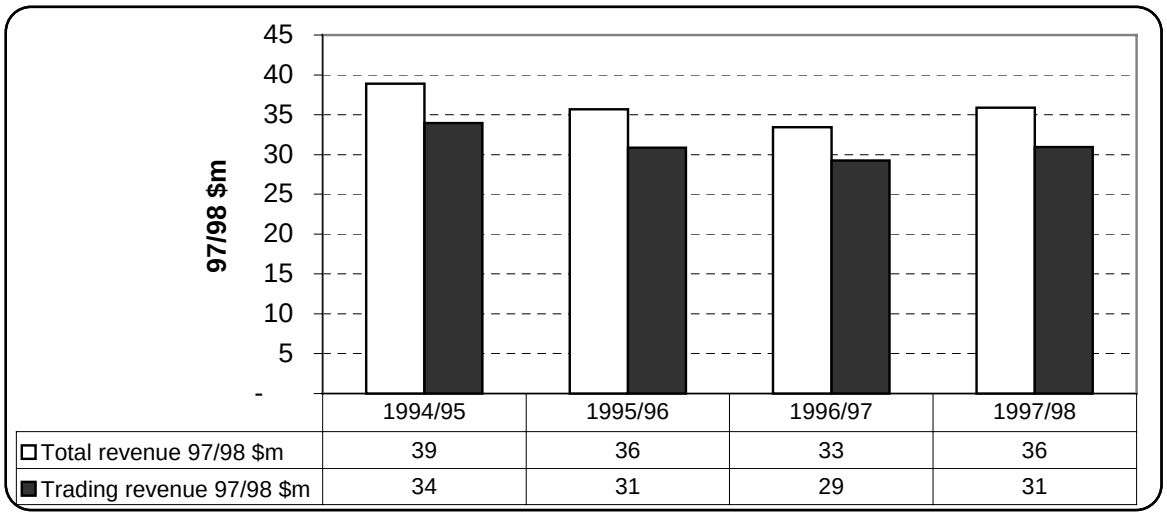
Source: Annual information returns; consolidated entity view.

A4.1.1 Revenue

Figure A4.1 shows revenue in real terms:

- over the five years there was an 8 per cent drop in total revenue in real terms
- trading revenue dropped by 9 per cent in that period.

Figure A4.1 Wyong Council: Revenue (97/98 $m)



	1994/95	1995/96	1996/97	1997/98
Total revenue 97/98 $m	39	36	33	36
Trading revenue 97/98 $m	34	31	29	31

Source: Annual information returns; consolidated entity view.

A4.1.2 Expenditure

Table A4.2 shows the movements in real terms for operating expenditure items:

- labour costs have slowly increased for Wyong Council
- decreasing interest costs have offset increases in labour expenditure, leading to relatively stable total expenditure figures.

Table A4.2 Wyong Council: Cost trends (97/98 $m)

	1994/95	1995/96	1996/97	1997/98	Annual av. % change
Labour (excl employee provisions)	5	6	7	7	13.1%
Consultants	0	0	0	0	-3.8%
Hire & contract services	0	0	0	1	14.2%
Materials	2	2	2	3	11.1%
Energy	2	1	2	1	-4.1%
Licence fees	0	-	0	-	0.0%
BOO costs	-	-	-	-	n/a
Other	6	6	4	3	-19.1%
Sales tax, land tax & stamp duties	-	-	-	-	n/a
Employee provisions	3	2	2	4	5.3%
Total operating cost	18	18	18	19	1.4%
Depreciation	10	9	10	10	-0.2%
Interest (incl loan guarantee fees)	7	5	5	4	-16.5%
Total expenditure	35	32	32	33	-2.1%
Employee nos. (full-time equivalent)	203	203	203	203	0.0%

Source: Annual information returns; consolidated entity view.

A4.2 Debt position and credit rating position

The ratios in Table A4.3 measure the strength of Wyong's ability to pay for debt, interest and capital expenditure on an earnings basis and on a cashflow basis.

- The most significant measure of Wyong Council's performance is the significant reduction in gross debt leading to a declining net debt figure.
- The decreasing number of years needed to repay debt from funds (*funds flow net debt payback*) reflects the retirement of debt.
- The ability to pay interest on a funds basis (*funds flow interest coverage*) and from profit *(pre-tax interest coverage*) both showing an improving trend.
- Wyong Council has a steadily improving position in its ability to pay for capital expenditure without borrowing externally.

Table A4.3 Wyong Council: Debt and credit analysis ($m)

	1994/95	1995/96	1996/97	1997/98
Financial ratios on revalued asset basis				
Pre-tax interest coverage	1.7	1.7	1.4	2.0
Total debt/Total capital	14%	13%	10%	8%
Debt and cash position				
Gross debt level (inc overdraft)	66	59	50	43
Total cash & investment (ST & LT)	13	12	14	14
Net debt/(cash)	53	46	36	29
Credit Rating Ratios & Analysis				
Funds flow interest coverage	3.4	3.8	4.0	5.2
Funds flow net debt payback	4.1	4.1	3.4	2.3
Internal financing ratio	1.2	1.0	2.6	1.9

Source: Annual information returns; consolidated entity view

Table A4.4 shows Wyong Council's performance on a credit rating basis. Wyong attains an AAA rating for its ability to fund debt, capital expenditure and interest.

Table A4.4 Wyong Council: Credit rating for 1997/98

	Wyong	AAA	A
Funds flow interest coverage	5.2	4.0	2.8
Internal financing ratio	1.9	1.0	0.6
Funds flow net debt payback	2.3	4.0	9.0

Source: Annual information returns; consolidated entity view.

A4.3 Cashflow analysis

Table A4.5 records the details of the movements of significant cashflow items:

- receipts from customers show a significant decrease in 1995/96 but then remain steady
- reflecting the decrease in loan indebtedness, loan repayments far exceed proceeds from borrowing
- payments for plant and equipment have declined after the first two years surveyed.

Table A4.5 Wyong Council: Significant cashflow items ($m)

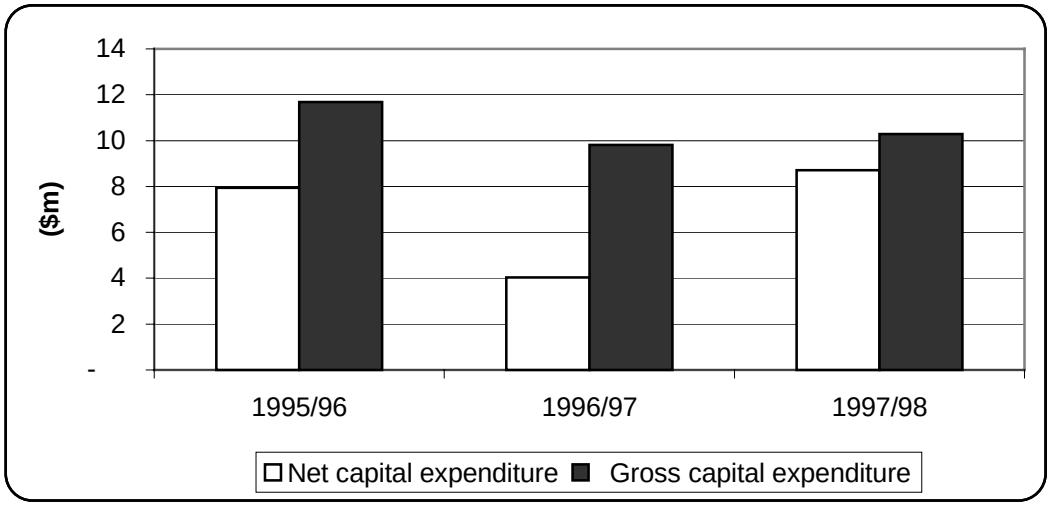
	1994/95	1995/96	1996/97	1997/98
Receipts from customers	42	33	33	32
Payments to suppliers & employees	(17)	(18)	(18)	(21)
Other	(6)	(5)	(4)	(3)
Cash flow from operating activities	19	11	12	8
Payments for plant & equipment	(11)	(12)	(4)	(7)
Proceeds from borrowing	1	1	3	4
Loan repayment	(10)	(11)	(10)	(11)
Notional tax paid to govt	-	-	-	-
Dividend paid	-	-	-	-
Other	5	7	3	5
Net increase/(decrease)	3	(4)	4	(0)
Cash at end of year	13	9	13	12
Current assets less current liabilities	(0)	1	3	2

Source: Annual information returns; consolidated entity view.

A4.4 Capital expenditure

Complete information for capital expenditure was not available. Figure A4.2 shows capital expenditure from the available information. No particular trend is evident. However low capital expenditure in 1996/97 mirrors low payments for plant and equipment in that year.

Figure A4.2 Wyong Council capital expenditure ($m)



Source: Annual information returns; consolidated entity view.

A4.5 Conclusion

Like Gosford City Council, Wyong Shire Council does not have dividend and tax payments making calls on its cashflows. Wyong has generated favourable cashflows from operating activities. A good part of these cashflows has been directed to retiring debt, generating a healthy credit rating.

The performance by Wyong Shire Council over the period 1994/95 to 1997/98 is marked by:

- steady levels of revenue
- increasing operating expenditure
- steady profit levels before interest and depreciation
- reducing debt, both gross and net
- positive cashflows.

The combination of strong cashflows, reducing debt levels and a good credit rating, ensures Wyong a healthy financial position.

ATTACHMENT 5 DEFINITIONS OF FINANCIAL INDICATORS

FINANCIAL INDICATORS	GENERAL DESCRIPTION	DEFINITION/COMPONENTS
Funds Flow Adequacy	Ability to generate funds to cover primary cash requirements	(Net Profit after Tax + Depreciation & Amortisation) / (Dividends + Capex)
Funds Flow Interest Coverage	How many times funds from operations covers interest payments	(Net Profit before Tax + Depreciation & Amortisation + Net Interest) / Net Interest
Funds Flow Net Debt Pay Back	How many years it will take to pay back total debt	(Total Debt– Cash) / (Net Profit after Tax + Depreciation & Amortisation)
Internal Financing Ratio	Funds retained as a proportion of capital expenditure	(Net Profit after Tax + Depreciation & Amortisation – Dividends) / Capex
Pre-tax Interest Coverage	How many times profit before tax covers interest payments	Profit before Interest and Tax / Net Interest
Total Debt / Total Capital	Proportion of debt to equity capital	Total Debt / (Total Debt + Total Equity)
PBIT / Total Revenue	Ratio of profit realised per total revenue	Profit before Interest and Tax / Total Revenue
PBITDA /Total Revenue	Ratio of profit plus depreciation per total revenue	(Profit before Interest and Tax + Depreciation & Amortisation) / Total Revenue
PBIT / Funds Employed	Return on funds employed	Profit before Interest and Tax/ (Total Debt + Total Equity)
PBIT	Profit before interest and tax	Profit before Interest and Tax
PBITDA	Profit before interest and tax and depreciation & amortisation	Profit before Interest and Tax + Depreciation & Amortisation

ATTACHMENT 6 GLOSSARY AND ACRONYMS

BOO	Build Own Operate
COAG	Council of Australian Governments
EIS	Environment Impact Statement
EPA	Environment Protection Authority
Gosford; Gosford Council	Gosford City Council
Hunter Water; HWC	Hunter Water Corporation
IPART	Independent Pricing and Regulatory Tribunal of NSW
kL	Kilolitre
LBL	Load based licensing
ML	Megalitre
NCC	National Competition Council
NCP	National Competition Policy
NSOOS	Northern Suburbs Ocean Outfall Sewer
OFWAT	Office of Water Services, the UK water services regulator
SCI	Statement of Corporate Intent
SMP	Stormwater Management Plan
STP	Sewage treatment plant
SVA	Shareholder value added
Sydney Water; SWC	Sydney Water Corporation
Wyong; Wyong Council	Wyong Shire Council