

# **IPART**

## **Supplementary Submission Review**

**Sydney Catchment  
Authority**

**Final Report**

**July 2005**

## Notice

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## Document History

JOB NUMBER: 5030488			DOCUMENT REF: 5030488/73/DG/114			
Revision	Purpose and Description	Originated	Checked	Reviewed	Authorised	Date
0	Draft for Review	JNSJ	AMD	RBS	RBS	05.07.05
1	Final	JNSJ	CJO	RBS	RBS	01.08.05

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## GLOSSARY OF TERMS

<i>Term</i>	<i>Meaning / Definition</i>
AIR	Annual Information Return
capex	capital expenditure
Determination	The price limits set by a regulator
DEC	Department of Environment and Conservation
FY	Financial Year. We express expenditure in all tables related to the end of each financial year. For example, the financial year 2005/06 is shown as 2006.
IPART	Independent Pricing and Regulatory Tribunal
KPI	Key Performance Indicator
NSW	New South Wales
opex	operating expenditure
price control period	The period over which price limits are determined
price path review	The review of price limits for the price control period
price base	All expenditure is reported as the cost in year 2004/05
SCA	Sydney Catchment Authority
SIR	Special Information Return
	Throughout this report, all capital and operating expenditure is reported by financial year ending 30 June for each year. For example expenditure in year 2006 refers to the financial year commencing on 1 July 2005 and ending 30 June 2006

# 1 Introduction

In September 2004, the Independent Pricing and Regulatory Pricing Authority of New South Wales (IPART) appointed Atkins/ Cardno to carry out a review of the capital expenditure, operating expenditure and asset management practices of the Sydney Catchment Authority (SCA). We prepared a Final Report<sup>1</sup> dated February 2005 on the SCA's Submission to IPART dated 12 November 2004, including the Annual Information Return (AIR) and Special Information Return (SIR) spreadsheet dated 16 November 2004. IPART issued its Draft Determination and Report<sup>2</sup> in June 2005.

The Sydney Catchment Authority prepared a Supplementary Submission on operating and capital expenditure proposals to IPART dated March 2005. We were appointed by IPART to carry out a review of this Supplementary Submission. Our brief in respect of the SCA Submission was

For operating expenditure, to;

- (i) *“provide the consultant's opinion as to the efficiency of the agency's proposed additional level of operating expenditure for each year between 2005/2006 and 2008/2009 and provide for each year estimates, with supporting reasons, of the level of operating expenditure that is required to efficiently undertake their regulated functions;*
- (ii) *Identify and analyse any additional transfers of costs between regulated and unregulated parts of the water business, subsidiary or parent agency or businesses and comment on any such transfers which in the opinion of the consultant are inappropriate.*

For capital expenditure, to;

- (i) *provide an opinion as to the efficiency of each agency's capital expenditure program for the period from 2005/2006 to 2008/2009 and provide for each year estimates, with supporting reasons, of the level of capital expenditure that the consultant considers efficient in order to undertake each agency's business and functions.*
- (ii) *identify and segregate the capital works projects associated with assets for which developers will either contribute to the cost of provision or will build and possibly hand over to the agency and reconcile actual and proposed developer funded capital expenditure with forecast capital expenditure in Development Servicing Plans.”*

We undertook an initial desk top review of the Supplementary Submission in April 2005. We then issued an Information Request to the Agency, through IPART, to seek clarification of various aspects of the Submission. The Agency provided a detailed response in June 2005.

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<sup>1</sup> Capex Asset Management and Opex Review Sydney Catchment Authority Final Report, Atkins, February 2005

<sup>2</sup> Sydney Catchment Authority etc Draft Report and Draft Determination, IPART, June 2005

Our Supplementary Report addresses only those issues raised by the Agency in its Supplementary Submission. Reference should be made to our Final Report dated February 2005 for a comprehensive view on the level of operating and capital efficiencies applied to the Agency's Submission.

## 2 Methodology

### 2.1 The Supplementary Submission

Our methodology for the review of the Agency's Supplementary Submission differs in some respects from our approach to the main efficiency review. This is because our main review looked at all aspects of operational expenditure and capital programs. For the review of this Submission, we have not re-opened the complete efficiency review but have assessed the changes in expenditure reported by the SCA against our understanding of the Agency's asset base, program drivers and expenditure proposals included in our Main Report.

In our review, we considered several factors in determining whether changes in operating and capital expenditure can be considered as efficient expenditure. These are set out below.

#### ***Materiality***

Where reported changes in operating and capital expenditure do not have a material impact on price limits, then they should not be considered as a 'material' change. Materiality for the SCA as defined by IPART<sup>3</sup> was \$80,000 for operating costs and \$80,000 for capital expenditure.

#### ***Errors and Omissions***

In our efficiency review we were not required to audit the costs presented. Where errors and omissions, increasing or reducing expenditure, were subsequently identified by an agency, we have after due scrutiny recommended that these costs are included within the price control.

#### ***Operating Cost Increases due to External Requirements***

We have scrutinised any additional operating costs due to external drivers, for example demand management and DEC requirements. Where there is a clear additional external requirement to undertake more activities or construct additional assets then these costs have been included in the recommended expenditure.

#### ***Changes in Operating Costs due to Management Action***

Where changes to operating costs from the main Submission are reported and are due to management action, we consider whether the savings should be included within the efficiency targets set in the Draft Determination. For example, provision of vehicles where a change in procurement is to move from lease arrangements to purchase with resulting savings in total costs. We consider such changes to be management actions to pursue efficiencies which we should encourage. We consider two options, firstly to accept the changes in operating cost and capital expenditure and adjust the efficiency target, as we did for the main Submission; or we assume that these are management actions to achieve the efficiency targets

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<sup>3</sup> Email from IPART to Atkins 24 June 2005, 'Materiality'

set and assume no changes to opex, capex or the efficiency targets. We consider each case on its merits and discuss in subsequent sections of the report.

### ***Prudent Capital Expenditure***

Our view of prudent expenditure has changed with further information from agencies on the actual expenditure in year ending June 2005. We identify the scale of the reduction in expenditure and the reasons for change. We also identify the reasons for the reduction in expenditure; through for example slippage (outputs deferred), efficiencies gained or outputs not required.

### ***Changes in Capital Expenditure due to External Drivers***

We have reviewed and comment on additional information where the timing and scope of works are to meet external drivers such as growth, quality programs and priority sewerage.

### ***Changes in Expenditure due to Costs or Timing***

Revised priorities and changes in the timing and scope of schemes within the allowed capital expenditure are normally a matter for agencies in managing their program. However, we have looked at and commented in any significant changes in expenditure so soon after the main Submission.

We also reviewed additional information provided by agencies to support the timing and scope of their original Submissions; for example specific schemes identified by HWC.

We have reviewed our opinion on achievability following the reported actual expenditure in 2005 compared with planned expenditure reported in November 2004. Where the impact of slippage results in a significant increase in expenditure between 2005 and 2006, we have challenged the achievability of this increase and have, in some instances, reprofiled the expenditure proposed to reflect the most likely outcomes.

### ***Identification of Efficiencies in 2005***

From our analysis of the reasons for change between planned and actual expenditure in 2005, we have identified some efficiencies. This confirms our view that there are efficiencies to be gained within the current planned programs.

## **2.2 Methodology for Deriving Efficiency Targets**

### ***Approach***

Our approach to determining the efficient level of capital and operating expenditure of the agencies is based on a methodology developed by Ofwat<sup>4</sup> and applied to water companies in England and Wales over three price controls in 1994, 1999 and 2004. This methodology applies the concepts on continuing and catch-up efficiency described below. The methodology is a quantitative approach based on information supplied by water companies.

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<sup>4</sup> Future Water and Sewerage Charges 2005-10 Final Determinations, Ofwat 2004



For the New South Wales agencies, there is insufficient information to allow a robust quantitative assessment to be made. We have therefore applied a qualitative assessment, following the same methodology, based on an assessment of processes, interviews with agency staff and a review of sample capital schemes and operational processes.

In regulatory reviews of this nature there is usually a wide information asymmetry between agencies and reviewer. As reviewer, we therefore make an assessment of the agency's performance and apply our judgement, developed from wide experience of undertaking efficiency views for price controls, asset management, water engineering and utility management in Australia and internationally, to form our independent professional opinions. We summarise our methodology below, addressing capital and operating expenditure.

### **Capital Expenditure**

For each agency's capital expenditure IPART requires us to:

- *“Provide an opinion as to the efficiency of each agency's capital expenditure program for the period from 2005/2006 to 2009/2010 and provide for each year estimates, with supporting reasons, of the level of capital expenditure that the consultant considers efficient in order to undertake each agency's business and functions.”*

#### *Historical and Current Expenditure*

In order to evaluate the prudence of historical expenditure we reviewed a representative sample of completed schemes. We reviewed the need for each scheme, its timing, the difference between anticipated and out turn costs and any cost control measures that were employed, to form a view on this aspect of the agency's expenditure. We identified any scheme that was not, in our opinion, consistent with the core business of the agency. Finally, we compared actual expenditure against that allowed by IPART in its 2003 Determination and reviewed the reasons for any variances.

#### *Future Expenditure*

Our approach to determining recommended allowable future capital expenditure is based on an assessment of the capital expenditure Submission drawn from a review of a representative sample of schemes, our views on asset management, procurement and the robustness of cost estimates. We also confirmed the drivers of expenditure and the timing of programs of work; in particular for growth and new standards.

From our assessment, we excluded expenditure which was not related to the agency's core business. We made specific adjustments to the expenditure profile to reflect our comments on the scope, cost and timing of schemes. For some agencies we reprofiled areas of expenditure to reflect likely limitations in achievability. Finally we made adjustments to expenditure to reflect the potential for continuing and catch-up efficiencies.

### **Capital Efficiency Methodology**

Our assessment of capital efficiency is based on the concepts of continuing and catch-up efficiency following the Ofwat methodology.

**Continuing efficiency** is the scope for top performing or frontier companies (agencies) to continue to improve their efficiency. It reflects the continuing efficiencies being gained across all major sectors through innovation and new technologies.

**Catch-up efficiency** is the scope for all other utilities to reach the performance of a frontier utility.

This concept was developed and applied by the Office of Water Services (Ofwat) in England and Wales for the 1999 Periodic Review and also used in the 2004 Periodic Review<sup>5</sup> and subject to independent scrutiny by the UK Competition Commission<sup>6</sup>.

There are two methods that Ofwat applied to assess the scope of capital efficiencies; firstly the use of econometric models built up from time series data across the companies. Secondly, the use of a 'Cost Base' analysis.

The Cost Base analysis requires companies to submit the unit costs for a range of activities within their investment plans; for example mains laying in various diameters, mains rehabilitation, sewer laying, construction of treatment works and replacement of pump assets. Ofwat then analyses the range of unit costs for each item, or groups of items, and identifies a benchmark or 'frontier' company. This analysis is based on companies' data and is subject to independent review. Ofwat then assumes that other companies will progress towards the benchmark company over the price control period; the extent of this catch-up is a policy decision made by Ofwat. The analysis resulted in significant targets being set for companies to achieve.

Trends in unit cost savings over the period 1994 to 1999 and 1999 to 2004 were analysed by London Economics<sup>7</sup> in November 2003. It looked at the change in the Cost Base standard costs as submitted by companies over the period PR94 to PR99 and PR99 and PR04. This was based on company data which was subject to independent review and summarised in Table 1 below.

Investment Area (PR = Periodic Review)		Calculated change PR94 to PR99 (%)	Calculated change PR99 to PR04 (%)	Typical standard costs used in the analysis
Water Service	Infrastructure	-10	-15	Mains laying and rehabilitation
	Non-infrastructure	-28	-30	New and replacement pump assets
Sewerage Service	Infrastructure	-9	-20	Sewer laying and insituform rehabilitation

Future Water and Sewerage Charges 2005-10 Final Determinations, Ofwat 2004

<sup>6</sup> Sutton and East Surrey Water plc, A report on the references under sections 12 and 14 of the Water Industry Act 1991, Competition Commission 2000 and Mid Kent Water plc, A report on the references under sections 12 and 14 of the Water Industry Act 1991, Competition Commission 2000.

<sup>7</sup> PR04 Scope for Efficiency Studies Final Report to Ofwat, London Economics et al, Nov 2003.

	Non- infrastructure	-14	-5	Sewage treatment assets
	Other assets	No data	-10	Storage tanks

Table 1 Cost Base Comparisons

Source: London Economics<sup>4</sup> tables 5.3 and 5.4

London Economics reviewed the company and independent reporter comments on the submissions and explanation for the reduction in standard costs. Some 60% of the changes are due to improved procurement and program management practices, 30% of the change was due to previous errors, better understanding or methodology changes. The application of value engineering was also identified. Reductions apportioned to standardisation and technological change was 10%. While these relative weightings are subjective, the analysis identified the key areas of improvements.

Companies also identified in annual reports to Ofwat that the main reasons for these savings were related to improved procurement and management practices, for example framework agreements, contract alliancing, risk management, contract batching and project synergies. In essence, savings were achieved by reducing risk to companies and contractors through their early involvement in the implementation processes and smoothing workloads, which allow contractor efficiencies to be shared with companies.

Ofwat was able to collect and analyse extensive data sets on costs and performance to allow a quantitative assessment of catch-up efficiencies to be made. In New South Wales, the extent of data is not sufficient to carry out a quantitative analysis. We have therefore applied a qualitative assessment of the capital processes currently in use, or recently developed, by each agency to manage capital expenditure, and the methods and costs used to prepare the capital expenditure proposals in the SIR. We have thus reviewed four key processes, identified by the London Economics report as being fundamental to the efficient delivery of the capital program:

- Asset management;
- Cost estimating;
- Procurement; and
- Program management.

The approach is consistent with the methods we applied to efficiency studies to support price controls in the postal sector in the UK and to gas and electricity sectors in Northern Ireland.

We focussed our approach on asset management process in place, being applied and to be implemented. We looked at the methods used to prepare cost estimates and the extent of contingencies included. We evaluated the current and proposed procurement processes, compared these with best practice and assessed the impact of improved procurement practices on the capital expenditure proposals. Our views on program management were influenced by the analysis of historical

expenditure, planned and actual expenditure in 2005, and outputs delivery and discussions with agency staff.

#### *Catch-up Efficiency*

We applied our judgement to determine the level of catch-up efficiency that could be achieved by 2009, based on our detailed experience of best practice applied in England and Wales, the results of what has been achieved by water companies in England and Wales, and our qualitative assessment of each agency's capital planning processes.

The London Economics analysis in Table 1 showed a range of savings from 5% to 30%. London Economics suggested that, disregarding some data issues, the likely range is 4% to 20% over the five year period. These values include catch-up and continuing efficiency.

From our qualitative assessments of the NSW agencies, we identified several areas where there is potential to improve capital processes up to the frontier company or agency. These are discussed in our February 2005 reports on the agencies. Our findings from this review are that the best performing agencies in NSW are equivalent to the average large water and sewerage utilities in England and Wales. Our assessment resulted in recommended catch-up efficiencies in the range 2 to 3% in 2006, increasing to 9% in 2009. When continuing efficiency assumptions are included, these targets are broadly equivalent to about half the efficiencies gained by England and Wales companies over an equivalent period.

Our approach has been to phase catch-up efficiency over the price control period, recognising that the benefits arising from improvements to processes will take some time to realise.

#### *Continuing Efficiency*

We have assumed a continuing capital efficiency of 0.5% per annum over the period 2006 to 2009 to reflect the impact of new technology and innovation which all agencies, including a frontier agency, should achieve. This figure is factored down from the identified potential for continuing efficiency to reflect other factors which may affect these comparisons. This assumption is informed by productivity information in Australia<sup>8</sup> and assumptions by Ofwat in 1999 and 2004. We suggest that any significant differences between the forecast and outturn continuing efficiency should be considered from a retrospective analysis of prudent expenditure at the next price path review.

#### **Operating Expenditure**

For operating expenditure IPART requires us to:

- *“Identify and analyse the agencies’ potential for cost reduction for each function and make recommendations, with supporting reasons, about efficiency gains that the Tribunal can consider when determining efficient operating expenditure levels for price setting. If current expenditure in an*

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<sup>8</sup> Productivity in the Market Sector, National Accounts Table 22, Australian Bureau of Statistics, 2004.

*area of operations is assessed as inadequate, specification and quantification of recommended additional expenditure should be undertaken.*

- *Provide the consultant's opinion as to the efficiency of each agency's proposed level of operating expenditure for each year between 2005/2006 and 2009/2010 and provide for each year estimates, with supporting reasons, of the level of operating expenditure that is required to efficiently undertake each agency's regulated functions"*

#### *Future Expenditure*

Our approach to determining recommended allowable future operating expenditure is similarly based on the Ofwat methodology of continuing and catch-up efficiencies. There is insufficient quantitative data to apply econometric modelling for this review. We therefore followed a qualitative approach examining operating cost processes, assessing the agency's operating costs by service area, the management structures it has in place, the processes that are established to manage operating costs, and specific agency issues impacting on operating costs.

We excluded expenditure not related to the core business. We made specific adjustments to areas of expenditure to reflect the findings of our review of costs and processes. We made general adjustments to the expenditure to reflect continuing and catch-up efficiencies. For some agencies we recognised that a proportion of operating costs are not directly controllable.

#### **Operating Efficiency Methodology**

Our approach to operating efficiency is similar to capital, using the concepts of continuing and catch-up efficiency. Continuing efficiency is the scope for top performing, or frontier, companies (agencies) to continue to improve their efficiency. Catch-up efficiency is the scope for all other companies to catch up with the frontier agencies or utilities.

Our assessment is consistent with a methodology developed and applied by Ofwat in England and Wales for the 1999 Periodic Review and also used in the 2004 Periodic Review. The method was independently scrutinised by the UK Competition Commission<sup>9</sup>. The limited extent of data available from agencies in New South Wales does not allow the application of a detailed quantitative approach. Our opinion is therefore based on an assessment of operating cost processes against best practice, the potential for savings identified from our detailed reviews and a comparison with the level of efficiencies achieved by water utilities in England and Wales.

Our assessment took into account of;

- actual performance of companies in England and Wales over the period 1999 to 2004, as discussed below;

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<sup>9</sup> Sutton and East Surrey Water plc, A report on the references under sections 12 and 14 of the Water Industry Act 1991, Competition Commission 2000 and Mid Kent Water plc, A report on the references under sections 12 and 14 of the Water Industry Act 1991, Competition Commission 2000.

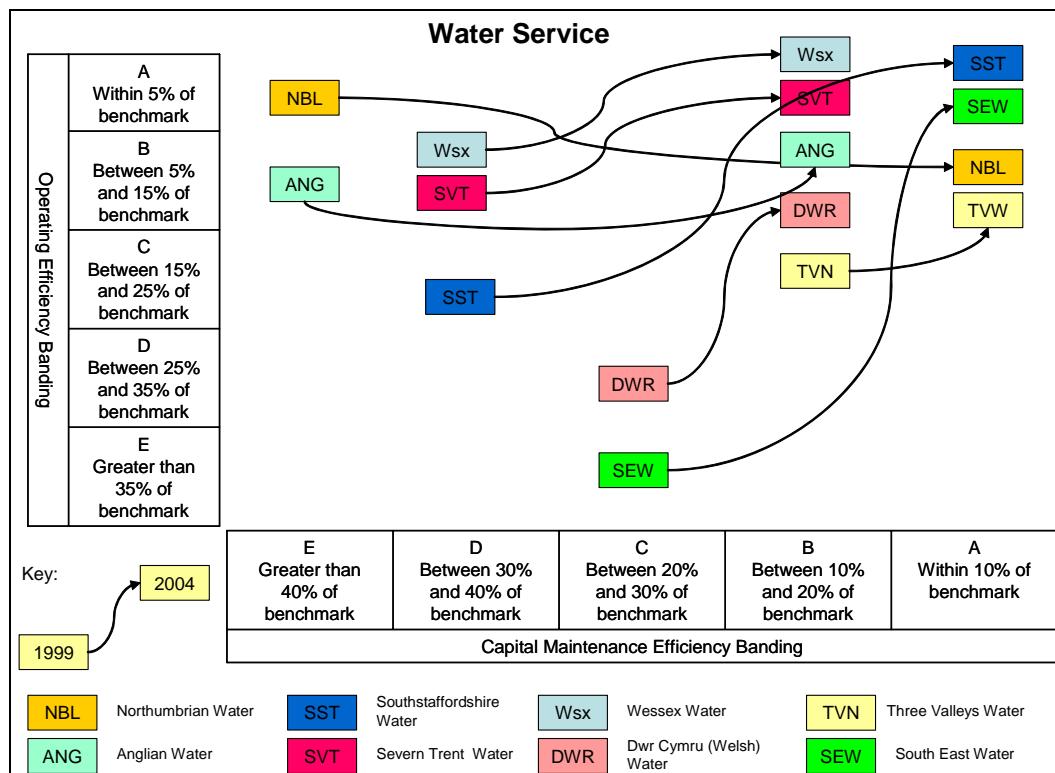
- the proposed efficiency savings by the Scottish Water Industry Commissioner<sup>10</sup> which proposed a one-off efficiency of 18% on baseline operating costs for the four year price control;
- the final Water Price Review for the Victorian Water agencies by the Essential Services Commission<sup>11</sup> which applied a 1% per annum productivity factor to operating costs.

Our qualitative review of agencies' operating costs included assessments of processes, management structures, the extent of activity based costing and identification and monitoring of cost drivers; we compared these with current best practice. We commented in our agency reports on the possible scope for efficiencies. We also took account of each agency's approach to efficiency savings and its own efficiency proposals.

Water companies in England and Wales were set challenging operating expenditure targets for the period 2000 to 2004 and most achieved these. For example, the average annual continuing efficiency target set by Ofwat at the 1999 Periodic Review was 1.4% per annum and the annual catch-up efficiency ranged from 0-3.5%, with an average 1% per annum. These percentages were applied to the total operating expenditure and no differential was made between controlled and uncontrolled costs.

Several companies moved closer ("caught-up" with) to the frontier company over this time, as shown in Figure 1.

Figure 1 Movement of English Companies towards the Frontier – Water Service



<sup>10</sup> Draft Determination of Price Limits for Scottish Water, Water Industry Commissioner Scotland, June 2005

<sup>11</sup> Water Price Review: Metropolitan and Regional Businesses' Water Plans Final Decision, Essential Services Commission, June 2005

Source: Ofwat Periodic Review – Final Determinations 1999 and 2004

### *Continuing Efficiency*

The continuing improvement element of efficiency relates to the increased productivity derived from process innovation and new technology that all well performing businesses should achieve, including frontier agencies. This applies to a range of industry sectors. Information from the Australian Productivity Commission and the Bureau of Statistics suggest that productivity in Australia is increasing on average at about 1% per annum. Comparative data from regulators in England and Scotland suggest a range of continuing efficiency values from 1.4% in 2000 to 0.6% in 2004. We have taken a figure of 0.8% per annum to recognise exogenous factors which may restrict the agency's ability to achieve continuing efficiency.

Our view is that using just the utility sector as a measure for productivity is not appropriate due to its relatively small size and sensitivity to the influence of large utilities on sector trends. However, it is appropriate to compare productivity within similar sectors of industry to assess the impact of innovation and new technology in more competitive areas of business.

We noted that one agency is developing a total factor productivity methodology to understand trends in its own productivity over time for comparison with the utility sector and other sectors. The initial results are encouraging and the approach provides a good basis for further development. A key issue is the definition of outputs and how the influence of quality and service performance may be modelled. There is clearly scope for further work in this area over the price control period to develop total factor productivity methodologies within and across utilities to provide an econometric approach to the assessment of future efficiencies.

### *Catch-up Efficiency*

Our qualitative approach examined operating cost processes, assessed the agency's operating costs by service area, the management structures it has in place, the processes that are established to manage operating costs, and specific agency issues impacting on operating costs. From this analysis of each agency, we proposed a range of catch-up efficiencies from 1%/a up to 1.5%/a across the agencies, with efficiencies for the SCA commencing in 2007. These percentages take account of elements of operating costs which are not controllable. These efficiencies are of a similar order as the Ofwat proposals in 2004. We have not factored the Ofwat proposals down as, from our assessments of agencies capability, there is scope for efficiency improvements. Indeed, Sydney Water's own proposals are to outperform our assumed efficiencies in the first two years of the price control period.

## 2.3 Relative Price Increases

Agencies have commented in their submissions on the relative increase in construction costs in New South Wales compared with CPI and the impact on the outturn costs for assets. Our view is that setting efficiency targets is independent of changes in construction price indices. Our brief from IPART relates to advice on the level of efficiency for operating and capital efficiencies; it does not cover

forecasts on the likely variance between construction prices and CPI over the coming four years.

The Tribunal confirmed that the issue of relative price increases was a matter for IPART to consider taking into account submissions from agencies and the level of contingencies built into current capital programs.



## 3 Operating Expenditure

### 3.1 Review of Opex Issues

The SCA's response to the Atkins/Cardno Final Report raised concerns over opex efficiency targets, with the SCA claiming that its business was not easily comparable with other typical water agencies.

The SCA's Supplementary Submission, dated March 2005, outlined revised capex projections without any indication of the impact on opex projections. The SCA was subsequently questioned about opex issues related to:

- the development of a business case for opex increases for enhanced yield management; and
- the cost of grants to local governments for improved sewage treatment, compared for instance with the cost of improved water treatment by customers (e.g. by Sydney Water).

We comment below on these issues.

#### ***Enhanced Yield Management Processes***

The SCA has not provided a business case for the proposed opex increases to enhance catchment yield management processes including operation of telemetry. In this case, we would endorse the Tribunal's recommendation as contained in its Draft Determination, that the proposed additional increases not be provided. We still consider there is scope for significant improvements to bring the SCA monitoring and control systems to be in line with best practice.

However, we still recommend that the SCA needs to enhance its capability and capacity in this area, and that a business case for such increased expenditure may need to be considered by the Tribunal within the price path period.

#### ***Grants to Local Governments***

The SCA has proposed that opex on grants and sponsorships will remain constant in real terms at \$7.2M p.a. throughout the price path period. This expenditure category includes the \$20M, 5 year accelerated sewerage program announced by the Minister for Environment in June 2002. The funding announcement indicated that specific target projects would be completed by 2006. While we are not questioning the linkage of these activities to catchment/water quality outcomes, we are seeking clarification as to why this amount is constant, when the activities appear to be specific and changing in funding requirements. While these issues are not likely to impact during the early years of the price path, we would expect that changes to opex projections would be evident in the final years. In the absence of any information to the contrary, we recommend no change to our opex projections included in our Final Report.

### ***Catchment Management Expenditure***

The other question raised by our review related to the extent to which the SCA had identified business case justification for the level of catchment management expenditure projections, compared with the cost of additional treatment that may be needed if Sydney Water had to use treatment to achieve similar objectives.

While this is an inter-agency issue, the SCA is in a monopoly situation and should be in a position to be able to quantify the benefits to bulk water customers who are required to treat the raw water and pass on SCA bulk water charges. During the current pricing path, the SCA should be in a position to collect sufficient data so that by the time of the next Determination, costs can be quantified for different levels of catchment management activities, against the risk of achieving raw water quality parameters that may be more cost effectively removed from the catchment than by treatment by the SCA's customers. This outcome should be considered as a requirement within the Determination.

### ***Vehicle Fleet Management and Information Technology***

In relation to a decision to buy its vehicle fleet in lieu of leasing, the SCA has advised of potential opex savings of \$0.5M p.a. Based on this advice, we have recommended that opex projections are reduced by \$0.5M p.a. from 2006 onwards.

We consider that this is an example of the type of efficiencies that the SCA should be able to realise over the pricing path. We recommend that IPART adjusts the efficiency targets identified in our Final Report to those proposed below, and recognises that this is a good example of the efficiencies that can be gained.

Further un-quantified operating savings from purchase compared with lease of IT equipment are proposed which we assume are included within the operating cost efficiencies.

### ***Operating Cost changes due to Capital Expenditure***

The IPART Draft Determination has included the full operating cost increases from the Deep Storage schemes and environmental monitoring costs. We found these costs were based on preliminary estimates and consider them to be uncertain. We consider that opex efficiencies will result from the phasing in of arrangements and that further consideration of efficiencies should be identified in final design and optimisation of operational rules. Our proposed efficiency targets are recommended to encourage the SCA to realise firm but achievable efficiencies. No operating costs were included for operating the Shoalhaven scheme although this will not be operational until the end of the price control period. Consequently we have retained our original recommendation on adjustments for opex related to capex.

## **3.2 Revised Operating Cost Efficiency Projections**

Our revised average efficiency target recommended for the SCA after allowing for the SCA identified \$0.5M p.a. cost savings is 1.075% per annum, resulting in a 2009 target of 4.3% from the base year as shown in Table 2.

	Efficiency (%)			
	2006	2007	2008	2009
Continuing efficiency	0.8	0.8	0.8	0.8
Catch-up efficiency	0.0	1.0	1.0	1.0
Combined efficiency	0.8	1.8	1.8	1.8
<b>Cumulative effect</b>	<b>0.8</b>	<b>2.6</b>	<b>4.4</b>	<b>6.2</b>
Less SCA proposed efficiency	0.8	0.7	0.6	1.9
<b>Net Efficiency (cumulative)</b>	<b>0</b>	<b>1.9</b>	<b>3.8</b>	<b>4.3</b>

Table 2: Recommended Efficiencies

The cumulative result from our review considerations are outlined in Table 3.

Section A of the table outlines the quantum of adjustments proposed by the Agency. Section B outlines the Agency's reasons for adjusting base year opex. Section C outlines the Agency's identified cost savings and cost increases, while Section D outlines the recommended opex adjustments based on this review.

Section A									
Sydney Catchment Authority									
Real OPEX (\$M 04/05) Proposed by Agency									
Variation from base Year	2003	2004	BASE YEAR 2005	2006	2007	2008	2009	2010	
projected OPEX	84.721	78.167	79.164	79.247	80.638	80.813	79.726	88.714	
total adjustment from base year	5.557	-0.997	0.000	0.083	1.474	1.649	0.562	9.550	
	7.02%	-1.26%	0.00%	0.11%	1.86%	2.08%	0.71%	12.06%	
Section B									
Agency Reasons for Adjustments									
	2003	2004	2005	2006	2007	2008	2009	2010	
due to Capex	-	-	-	0.683	2.062	2.043	2.043	4.844	
Vehicle Fleet cost savings	-	-	-	(0.500)	(0.500)	(0.500)	(0.500)	(0.500)	
adjustment to mandatory standards (no capex involved)	-	-	-	-0.100	-0.088	0.106	-0.980	5.206	
<b>TOTAL</b>	-	-	-	<b>0.083</b>	<b>1.474</b>	<b>1.649</b>	<b>0.562</b>	<b>9.550</b>	
Section C									
Agency proposed Improvements and Increases									
	2006	2007	2008	2009					
business improvement	-0.63%	-0.63%	-0.63%	-0.63%	(0.500)	(0.500)	(0.500)	(0.500)	
opex increases	0.86%	2.60%	2.58%	2.58%	0.683	2.062	2.043	4.844	
adjustment to mandatory standards (no capex involved)	-0.13%	-0.11%	0.13%	-1.24%	-0.100	-0.088	0.106	-0.980	
<b>TOTAL</b>	<b>-0.76%</b>	<b>-0.74%</b>	<b>-0.63%</b>	<b>-1.87%</b>	<b>0.083</b>	<b>1.474</b>	<b>1.649</b>	<b>0.562</b>	
efficiency improvements	-0.76%	-0.74%	-0.63%	-1.87%					
Section D									
Recommended OPEX Adjustment (real 04/05 \$M)									
	2006	2007	2008	2009	2,006	2,007	2,008	2,009	
<b>Total Proposed Opex</b>	including fleet management savings				<b>79.247</b>	<b>80.638</b>	<b>80.813</b>	<b>79.726</b>	<b>2,010</b>
Adjustment for enhanced capability					0.000	0.000	0.000	0.000	
Adjustment to Opex due to Capex						-0.500	-1.043	-1.043	
<b>Revised Opex Projection</b>					<b>79.247</b>	<b>80.138</b>	<b>79.770</b>	<b>78.683</b>	
Recommended efficiency target	0.0%	-1.9%	-3.8%	-4.3%	0.000	-1.523	-3.031	-3.383	
<b>Recommended Opex Projection</b>					<b>79.247</b>	<b>78.615</b>	<b>76.739</b>	<b>75.300</b>	
<b>Total Adjustment</b>					0.000	-2.023	-4.074	-4.426	

Table 3 Recommended Opex Projection (\$M 04/05)

Note: Amounts shown may be rounded

### 3.3 Recommended Operating Expenditure

Our approach to determining recommended allowable operating expenditure is based on our detailed assessment of the SCA Supplementary Report and subsequent response to our Information Request in June 2005, our February 2005 Report on the SCA's earlier Submission and the IPART Draft Determination.

We have followed a staged approach based on our findings discussed in earlier sections.

We have:

- (i) removed the opex increases to enhance catchment yield management processes including operation of telemetry which we proposed in our February 2005 Report as no business case has been provided;
- (ii) reduced the opex impact of the deep storage operating costs and costs to maintain environmental flows as the basis for these costs has not been clearly demonstrated;
- (iii) adjusted for the savings in operating costs from the change in vehicle and IT procurement; and
- (iv) adjusted the opex efficiencies to take account of some efficiency savings identified in (iii) above.

Financial Year	2005/06	2006/07	2007/08	2008/09	Total
<b>Sydney Catchment Authority</b>					
Agency forecast (Nov 2004 SIR)	79.7	81.1	81.3	80.2	322.3
Atkins/Cardno Final Report recommendation	80.1	80.5	79.0	76.9	316.5
Tribunal's draft findings	79.6	79.7	78.2	76.1	313.6
Atkins/Cardno Supplementary Report	79.2	78.6	76.7	75.3	309.8

*Table 4 Opex Recommendations (\$M 04/05)*

The main reasons for the reduction in expenditure from our Final Report Recommendation are the non-inclusion of expenditure for enhanced capability to optimise the yield of existing resources where we had proposed \$7M over the price control period. We discuss this in Section 3.1 above.

## 4 Capital Expenditure

### 4.1 Total Capital Expenditure

The Sydney Catchment Authority has submitted a revised SIR dated March 2005 which reports a significant increase in expenditure when compared with the SIR submitted in November 2004. This revised SIR is summarised in Table 5 below. This analysis excludes the non-core capex for the mini hydro project which is defined as 'unregulated business'.

\$M 2004/05	2005	2006	2007	2008	2009
		<b>Proposed price control period</b>			
November SIR (capex 2)	73.4	164.7	125.1	136.9	85.6
Less non core capex	0	-0.2	-2.2	-6.6	-0.9
<b>Net capex November SIR (capex 2)</b>	<b>73.4</b>	<b>164.5</b>	<b>122.9</b>	<b>130.3</b>	<b>84.7</b>
March SIR	47.0	195.0	146.3	143.0	103.1
Less non core capex	0	-0.2	-2.2	-6.6	-0.9
<b>Net capex March SIR</b>	<b>47.0</b>	<b>194.8</b>	<b>144.1</b>	<b>136.4</b>	<b>102.2</b>
Difference in expenditure	-26.4	30.3	21.2	6.1	17.5

Table 5: Comparison of Expenditure proposals from November 2004 to March 2005 (\$M 04/05)

Note: Expenditure shown for 2005 relates to the previous price control period.

Source: SCA SIRs November 2004 and March 2005

This results in a net increase in capital expenditure of \$75.1M over the price control period offset by a reduction of \$26.4M in expenditure for 2005. We discuss the reasons for these changes in the following sections.

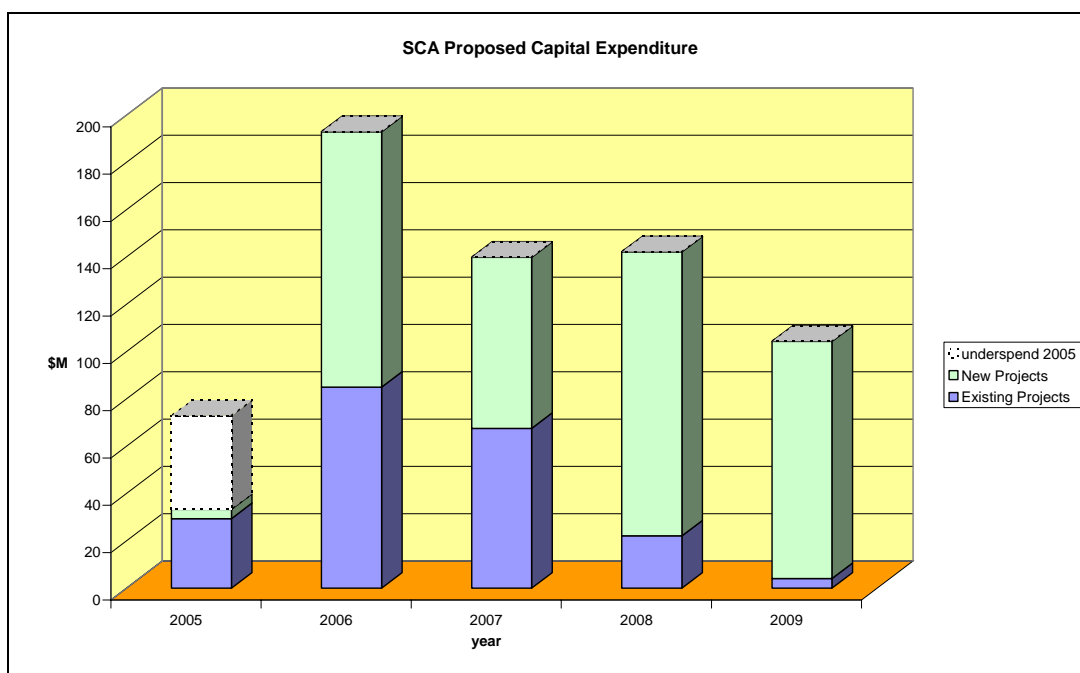
We noted two key issues which are also discussed in the following sections:

- (i) the significant reduction in the 2005 expenditure with significant slippage into future years. The SCA advised in June 2005 that the likely outturn for 2005 will be \$33.3M;
- (ii) the reducing profile of expenditure over the price control period indicative of a shortfall in medium term investment planning and limited application of asset management practice.

Expenditure over the period 2005 to 2009 is shown in Figure 2 below. This shows the significant reduction in capital expenditure in 2005. Note also the reducing trend in expenditure for capital maintenance of existing assets over the period.

This is indicative of the lack of application of the medium term asset management plan.

Figure 2 Sydney Catchment Authority Proposed Capital Expenditure



## 4.2 Expenditure in 2005

The SCA explained in response to our supplementary queries that expenditure for the year 2004/05 is now forecast to outturn at \$33.3M compared with the \$73.4M in the November SIR and \$47.0M in the March Submission. The SCA showed that the total outturn expenditure for 2003/04 and 2004/05 is \$31.3M less than the capex set by IPART in the mid-term review.

The reasons for this reduction in expenditure are set out in the SCA's response to our queries and summarised in Table 6 below.

\$M 2004/05	November 2004	March 2005	June 2005	Difference Jun – Nov	Comments
Warragamba projects	13.9	9.2	9.5	-4.4	Outlet valve project ahead of schedule. Delays to visitor centre, electrical upgrade and deferral of spare pipes and fittings for the pipeline
Prospect Pump Stn and dam	15	5.7	1.6	-13.4	Pumping station delayed following scheme review after significant cost increases.
Bulk Water Access Roads	4.3	4.6	2.0	-2.3	Works delayed due to cost increases and negotiations with Telstra. Also delays due to environmental issues.

\$M 2004/05	November 2004	March 2005	June 2005	Difference Jun – Nov	Comments
Penrith Head Office	3.8	0.4	0.3	-3.5	Project managers (DEC) advise that the project will not be delivered within original time frame.
Plant and Equipment	1.4	3.3	3.6	2.2	New allowance for replacement of vehicle fleet.
Deep Storages Warragamba, Avon and Napean	19.0	7.8	3.9	-15.1	Significant cost savings on the original preliminary estimates; includes \$3.9M efficiency from March to June 2005.
Other schemes	15.5	15.8	12.4	-3.1	Mainly slippage of schemes
<b>Total</b>	<b>72.9</b>	<b>46.8</b>	<b>33.3</b>	<b>-39.6</b>	

Table 6: Analysis of Expenditure in 2005 (\$M 04/05)

Source: SCA Response to Atkins Cardno Information Request

This analysis confirms our view expressed in our Final Report<sup>12</sup> that there is clear and systematic evidence of slippage of schemes. This in turn implies shortfalls in the effective management of the capital program. The result is that some key outputs planned for the previous price control have not been delivered. For example, capital maintenance works at Warragamba including the provision of spare pipes and fittings and construction of the Prospect Pumping Station have not been delivered. Improvements to access roads and provision of a new office have been deferred. Conversely, cost savings are reported from the original preliminary estimates for the deep storage schemes.

We conclude that there has been a significant reduction in expenditure for the year ending June 2005 due to slippage of schemes and savings from preliminary estimates for the Deep Storage schemes.

### 4.3 Expenditure for 2006 to 2010

The SCA capital expenditure proposals in Table 5 from the SCA March 2005 Supplementary Submission show a net increase of \$48.7M above the main Submission in November 2004, after taking into account slippage from 2004/05. The impact of a further slippage of \$13.5M reported in June 2005 is not reflected in the expenditures in Table 5.

The SCA has presented in its March Submission expenditure proposals related to existing projects in Table 7 below and Future Projects in Table 8. Expenditure is summarised in Table 9.

<sup>12</sup> Capex Asset Management and Opex Review Sydney Catchment Authority Final Report, Atkins, February 2005

\$M 2004/05	2005	2006	2007	2008	2009
		<b>Proposed price control period</b>			
Warragamba Aux Spillway	3.1	5.7	11.7	2.6	0.0
Warragamba Outlet Valves	5.4	2.4	0.2	0.0	0.0
Warragamba Electrical Upgrade	0.4	4.9	2.8	2.2	0.0
Warragamba Pipeline Spares	0.3	3.8	0.0	0.0	0.0
Bulk Water Access Rd Upgrade	4.6	7.2	5.8	4.6	0.0
SCA Dams environmental flows	0.1	0.7	0.7	3.1	0.0
Tallowa Dam Fishway	0.1	0.0	0.0	0.0	0.0
Fish river water supply	0.1	0.4	3.3	0.5	0.0
Prospect Pump Station	5.5	38.8	15.6	0.8	0.0
Penrith Head Office Relocation	0.4	3.3	4.2	0.0	0.0
General Facility Projects	11.6	10.5	18.9	5.6	1.3
Land and Buildings	1.1	1.8	1.7	0.5	0.5
Plant and equipment	3.3	5.6	2.7	2.1	1.7
<b>Total Existing Projects</b>	<b>36.0</b>	<b>85.0</b>	<b>67.6</b>	<b>22.1</b>	<b>4.1</b>

Table 7: SCA Proposed Existing Program Expenditure 2006 to 2009 (\$M 04/05)

Source: SCA Supplementary Submission to IPART March 2005, costs rebased at 2004/05 prices

Note: Expenditure shown for 2005 relates to the previous price control period.

We asked the SCA to explain the main changes to expenditure between the main Submission in November 2004 and the March 2005 Submission. The SCA responded in June 2005 with explanations and supporting documentation.

The main reasons for the cost increases above the November Submission are (\$M 04/05 pre efficiency)

- (i) Deep Storage schemes (+\$10.1M);
- (ii) Shoalhaven Scheme (-\$11.6M);
- (iii) Prospect Pumping Station and Dam (+\$16.0M);
- (iv) Wingecarribee Dam (+\$8.5M);



- (v) General facility projects (+\$13.1M);
- (vi) Business Efficiency (+\$16.9M);
- (vii) Tallowa Dam Fishpass (-\$6.2M).

In its March Submission, the SCA also provided a separate table showing expenditure for future projects. This is shown in Table 8 below with expenditure rebased to the 2004/05 price base.

\$M 2004/05	2005	2006	2007	2008	2009
		<b>Proposed price control period</b>			
Prospect Dam Remedial Works	0.2	9.7	2.8	0.0	0.0
Deep Storages Warragamba	5.0	43.7	6.6	0.0	0.0
Deep Storages Nepean and Avon	2.8	42.7	15.3	0.0	0.0
Groundwater Investigation	1.8	2.2	0.0	0.0	0.0
Shoalhaven Transfers	1.0	9.7	47.4	120.1	90.2
Environmental Flows	0.1	0.0	0.0	0.0	9.0
<b>Total Future Projects</b>	<b>10.9</b>	<b>108.0</b>	<b>72.3</b>	<b>120.1</b>	<b>100.2</b>

Table 8: SCA Proposed Existing Program Expenditure 2006 to 2009 (\$M 04/05)

Source: SCA Supplementary Submission March 2005 report adjusted to 2004/05 prices

We then compared total expenditure proposed in the SCA Submission document with the detailed expenditure proposals in the March SIR 'table capex 3'. This is shown in Table 9.

\$M 2004/05	2005	2006	2007	2008	2009
		<b>Proposed price control period</b>			
Total existing projects (T4.3)	36.0	85.0	67.6	22.1	4.1
Future projects (T4.4)	10.9	108.0	72.3	120.1	100.2
Total proposed expenditure (SCA summary)	46.9	193.0	139.9	142.2	104.3
Total expenditure from SIR Mar 05 less core expenditure (T4.1)	46.9	194.8	144.1	136.4	102.2
Differences (SIR less Summary)	0.0	1.8	4.2	-5.8	-1.9

Table 9: Summary of SCA Program Expenditure 2006 to 2009 (\$M 04/05)

Source: as shown

Taken cumulatively over the price control period, the SIR total expenditure is \$1.7M less than the summary report, weighted to the first two years of the price control. We have based our review on the expenditure shown in the summary report although our adjustments to the expenditure result in some reprofiling to address this undue weighting.

We comment below on specific variance in expenditure.

### ***Warragamba Schemes***

The SCA reports an increase of \$5.1M in its March 2005 Submission. This relates to settling an outstanding contractual claim, development of detailed designs for the spillway gates, landscaping and the development of the Visitors Centre. Supporting documentation was provided by the SCA. The design and installation of the spillway gates is a specialist task where there are high risks of cost overruns and we accept this increase. However, the risks of cost overruns should have been identified at an earlier stage in the capital planning process.

In its Draft Determination<sup>13</sup> IPART considered that, on the basis that the Conference Centre continues to be primarily used by the SCA, this expenditure is included on the RAB. We have therefore included this additional expenditure, although the scope of this Visitor's Centre has expanded to include residential facilities for 50 people. The SCA explains that these educational facilities are provided through its duties under the Sydney Water Catchment Management Act 1998. We have applied capital efficiencies to this expenditure.

The SCA confirmed that the major outlet valves scheme had been advanced while the electrical upgrade scheme had slipped. We consider these as management changes within the overall funding for existing mandatory standards that should not impact on the price control.

### ***Bulk Water Access Road Upgrades***

The SCA comments that a road condition audit currently being carried out should result in a better definition of the scope of works. Proposed expenditure is \$22M compared with \$16.6M in the SIR. The SCA has provided a detailed schedule of schemes and examples of Business Cases. We noted that actual expenditure in 2004/05 was \$2.6M compared with a planned \$4.3M. We accept the need to maintain the access road assets but question whether the proposed phasing is appropriate as the relative needs and timing are still awaited from the road condition audit. We suggest that the SCA expenditure should be phased evenly over the four year period 2006 to 2009. This profile would reflect the history of scheme expenditure and provide a sufficient period for scheme preparation. This period would provide scope for efficiencies; for example, the current proposals show ten contracts planned for 2007. This re-phasing would result in \$5.5M/a pre-efficiencies for this work. This is the same approach adopted in our Main Report but with some increased expenditure. This expenditure is included within 'Existing Mandatory Standards' in Table 9.

### ***Prospect Raw Water Pumping Station and Reservoir***

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<sup>13</sup> IPART, Draft Report on Draft Determination, June 2005

We have considered the pumping station and reservoir schemes together as they are linked to meet the recommendation in the McClellan Report. This recommendation is to allow stored water in Prospect Reservoir to be pumped to the treatment works in the case of either/ both Warragamba Pipeline and the Upper Canal being out of commission or due to a pollution incident. The scheme also requires remedial works to the Prospect Dam to allow water levels to be drawn lower than current practice. In the response from the SCA dated June 2005, we noted that the scheme had slipped with \$15.4M under-expenditure in 2004/05. In our main report, we accepted the need for and level of expenditure (subject to capital efficiencies) for this scheme as the scheme had been advanced to tender stage.

The SCA explained that the pumping station project was delayed pending an extended approvals process. The project has been re-appraised by NSW Treasury following a request for increased funding. The estimated cost of the schemes has increased from \$57.4M in the November SIR to \$73.5M in the March Submission. The SCA attributes this increase to changes in scope for the pumping station and upward price movements due to current market conditions. A detailed analysis of the tender costs and reasons for variance from the original budget was provided by the SCA. About 25% of the cost overrun was attributed to change in scope and 75% due to changes in price due to market conditions. The SCA comment that it is reviewing the scope for reducing costs with DEC.

If this scheme was not driven from the outcome of a public inquiry, we would question the costs and benefits of this work and whether any alternative solutions had been considered to reduce risks. The key issue at this stage relates to the robustness of the estimates and whether any change in scope can be accommodated. Following discussion with Tribunal and the SCA on 21<sup>st</sup> July 2005, the agency confirmed that the revised budget had been agreed with the Treasury subject to potential efficiency savings being realised.

### ***Wingecarribee Dam***

The SCA reports a proposed \$10.3M for safety upgrading to the Wingecarribee Dam. This expenditure is included in 'general facility projects' in Table 7. This compares with the \$1.5M included in the November SIR. While we have not seen the details of this scheme, it has an external reservoir safety driver and should be accepted.

### ***General Facility Projects***

In our Main Report, we included these projects in 'existing mandatory standards' and reprofiled expenditure to an average \$10M per year. This was because of the proposed high level of expenditure in 2005 and 2006, which then reduced significantly over the price control period. We found that this was indicative of a short term planning approach where insufficient planning was given to the four year period as a whole; this was confirmed to us in the way significant slippage occurs across years and price control periods. The SCA March Submission shows a similar reducing profile confirming this short run planning approach. We saw no reason to change the view in our February 2005 Report that the allowance to maintain existing mandatory standards should follow a relatively even profile over the price control period.

### ***Lands and Buildings***

We have excluded expenditure for the upgrade and demolition of cottages and other structures at dam sites and the upgrade and/or demolition and/ or archival recording of cottages and other structures in Braidwood. This is because the schemes do not form part of the agency's core business. This is consistent with our February 2005 report and the Draft Determination.

### ***Plant and Equipment***

The SCA explained its change in policy for the provision of IT systems and vehicles. Additional capital expenditure of \$8.3M is offset by savings in operating costs. From the SCA's detailed explanation, alternative procurement options are being explored and a firm strategy has yet to be approved. The SCA reports Indicative savings of \$500k/a on its current costs. We have not seen a Business Case to support this change in procurement to confirm the efficiencies claimed. We discuss this issue further in Section 3: Operating Costs. There are two options available to us to approach this change; either we can accept the changes in opex and capex reported by the SCA and include them in the corresponding capex and opex projections or we can accept this change as one initiative to meet the opex efficiency targets we have set. If there was no Supplementary Submission, the latter would have occurred and the SCA would have been able to claim efficiencies against the target. We have accepted the increase in capital expenditure and related savings in operating cost as a business efficiency.

### ***Business Efficiency***

In addition to the \$12.2M for plant and equipment, this expenditure line includes office relocation (\$7.5M), buildings (\$3.6M) and land (\$0.8M). The November SIR included \$11.8M for these drivers. Our variance analysis identifies Office Relocation (\$3.4M) and Buildings (\$0.7M) as slippage from 2005. Land shows a small reduction of \$0.2M.

### ***Deep Storages***

The original drought relief scheme was part of the Metropolitan Water Plan to abstract water from the lower levels of the Warragamba and Avon Dams at a cost of \$106M. In our Main report we expressed concern about the detail of the estimates and the level of contingency that had been applied.

In its March Submission and further explanation in June 2005, the SCA confirmed a further scheme to access deep storage in the Nepean Dam. The March 2005 proposed expenditure has been based on a more detailed analysis of scope and costs including current construction costs. The SCA confirmed that all the Deep Storage projects were on schedule for completion in mid 2006.

### ***Shoalhaven Transfer Scheme***

In its Draft Determination, IPART accepted the SCA original costing and timing for the Shoalhaven Transfer Scheme, adding;

*'to address specific risks associated with the timing and cost of the scheme by adjusting the agency's revenue requirement in the subsequent determination period to account for any unspent monies allowed by the Tribunal in the Determination'*

The March SIR includes \$268M for this scheme compared with \$280M in the November SIR, with some reprofiling of expenditure. In our Information Request in April, before the Draft Determination was published, we asked the SCA for further information on the scope and cost of the scheme. The Agency responded that the scheme is subject to Government consideration and no further information was currently available. Given the regulatory treatment of this expenditure discussed above, we suggest that the latest estimate from the SCA should be included in the allowed capital expenditure, subject to capital efficiency targets.

#### 4.4 Recommended Capital Expenditure

Our view of prudent expenditure in 2005 has changed from the February 2005 Report as a result of further information provided by the SCA in June 2005. We confirmed that the 2005 final outturn expenditure was \$33.3M. We confirm that \$33.1M is prudent expenditure with \$0.2M related to upgrading historic cottages and recreational facilities.

Our approach to determining recommended allowable capital expenditure is based on our detailed assessment of the SCA Supplementary Report and subsequent response to our Information Request in June 2005, our February 2005 Report on the SCA's earlier Submission and the IPART Draft Determination.

We have followed a staged approach based on our findings discussed in earlier sections.

- (i) We have made adjustments for slippage of expenditure from 2005 after the SCA advised that the likely outturn expenditure is \$33.3M. We have assumed that 95% of this expenditure is due to slippage and have reprofiled expenditure to 2006 and 2007. The remaining 5% is assumed to be efficiency savings, mainly as indicated by the SCA from the Deep Storage scheme;
- (ii) We have generally accepted the level of additional expenditure proposed by the SCA although we raised issues with two schemes. The significant increase in cost for the Prospect Pumping Station has been reviewed by NSW Treasury. The Treasury has confirmed the additional costs subject to efficiencies being achieved. We have included this additional expenditure within the program. Secondly, where the SCA is promoting efficiencies in IT and vehicle procurement after the November Submission and our February 2005 Report, we have included these changes in capex within the allowable expenditure and have assumed that the operating cost savings will contribute to the efficiency targets we have set;
- (iii) We remain concerned about the adequacy of the SCA's asset management processes and the profile of expenditure proposed. The profile showed that some 80% of capital maintenance expenditure is proposed for the first two years of the price control. We commented on this profile in our February 2005 report that *'we would expect to see a profile like this where schemes have been prepared individually and do not represent the outcome of an asset strategy and long term investment profile'*. We have maintained the profile for the Wingecarribee Dam remedial works and assumed an even profile for the remaining expenditure. We noted that actual 2005 expenditure for capital maintenance was the same order as our proposed

annual profile. An even profile would also give the SCA a greater opportunity to generate capital efficiencies;

- (iv) Deletion of non-core expenditure for upgrading and demolition of cottages;
- (v) We have applied capital efficiencies at the same level as proposed in our February 2005 Report;
- (vi) In view of IPART's approach to capital expenditure for the Shoalhaven scheme set out in the Draft Determination, we have used the SCA's latest estimate and phasing of expenditure.

Driver or Project (all costs \$M 04/05)	2005	2006	2007	2008	2009
		<b>Proposed price control period</b>			
Existing Mandatory Standards (existing projects except where identified below)	17.7	27.2	17.3	17.3	17.3
Deep Storage	3.9	86.4	21.9	0.0	0.0
Shoalhaven Transfers	1.0	9.7	47.4	120.1	90.2
Environmental Flows	0.1	0.7	0.7	3.1	9
Groundwater investigations	1.8	2.2	0.0	0.0	0.0
Tallowa Dam Fishway/ Offtake	0.1	0.0	0.0	0.0	0.0
Prospect PS and Dam	1.6	48.5	18.4	4.9	0.0
Warragamba Dam Spillway and Visitor center	3.2	5.7	11.7	2.5	0.0
Business Efficiency*	3.7	10.5	8.4	3.4	2.1
<b>Total Expenditure</b>	<b>33.1</b>	<b>190.9</b>	<b>125.8</b>	<b>151.3</b>	<b>118.6</b>
Efficiency (%)	0	3.5	5.5	7.5	9.5
<b>Recommended expenditure</b>	<b>33.1</b>	<b>184.2</b>	<b>118.9</b>	<b>139.9</b>	<b>107.3</b>

\* Business efficiency includes office relocation, land and buildings, plant and equipment

Table 10: Derivation of Recommended Capital Expenditure (\$M 04/05)

We present our recommended capital expenditure in Table 10 above. We consider that the resulting capital program provides the basis for the SCA to generate incentives and encourage innovation to undertake its business and functions.

Expenditure in 2005 relates to the previous price control period and represents the outturn expenditure for the year. This is a reduction of \$39.3M from the November 2004 Submission and represents a lower level of prudent expenditure.

## 5 Summary of Recommended Expenditure

### 5.1 Operating Expenditure

The recommended expenditure is shown in Table 11 below and is compared with the Agency forecast and the Tribunal's Draft Determination.

Financial Year	2005/06	2006/07	2007/08	2008/09	Total
<b>Sydney Catchment Authority</b>					
Agency forecast (Nov 2004 SIR)	79.7	81.1	81.3	80.2	322.3
Atkins/Cardno Final Report recommendation	80.1	80.5	79.0	76.9	316.5
Tribunal's draft findings	79.6	79.7	78.2	76.1	313.6
Atkins/Cardno Supplementary Report	79.2	78.6	76.7	75.3	309.8

Table 11: Recommended Operating Expenditure, Net of Efficiency (\$M 04/05)

Our revised average efficiency target recommended for SCA after allowing for the SCA identified \$0.5M per annum efficiency is 1.075% per annum, resulting in a cumulative 2009 target of 4.3% from the base year.

	Efficiency (%)			
	2006	2007	2008	2009
<b>Net Efficiency (cumulative)</b>	<b>0</b>	<b>1.9</b>	<b>3.8</b>	<b>4.3</b>

Table 12: Recommended Efficiencies (%)

We confirm that there were no issues of transfer of costs between the regulated and unregulated parts of the Business.

### 5.2 Capital Expenditure

Our view of prudent expenditure in 2005 has changed from the February 2005 Report as a result of further information provided by the SCA in June 2005. We confirm that the final outturn expenditure was \$33.3M. We confirm that \$33.1M is prudent expenditure with \$0.2M related to upgrading historic cottages and recreational facilities.

We conclude that there has been a significant reduction in expenditure for the year ending June 2005 due to slippage of schemes and savings from preliminary estimates for the Deep Storage schemes.

The recommended expenditure for the price control period is shown in Table 13 below. This profile takes account of slippage from 2005 and reprofiling capital

maintenance expenditure to show a relatively even profile of asset renewal expenditure, consistent with what we would expect from a robust asset management plan process. This recommended expenditure includes capital efficiencies which we proposed in the February 2005 report.

(\$M 04/05)	2005	2006	2007	2008	2009
		<b>Price control period</b>			
IPART Draft Determination	72.6	152.4	109.7	122.5	84.6
Recommended expenditure	33.1	<b>184.2</b>	<b>118.9</b>	<b>139.9</b>	<b>107.3</b>
Difference	-39.5	31.8	9.2	17.4	22.7

Table 13: Recommended Capital Expenditure (\$M 04/05)

We confirm that the \$33.1M represents prudent expenditure in 2005. The impact of the SCA Supplementary Submission is to increase total capital expenditure during the price control period by \$42.5M, mainly in years 2008 and 2009.

We confirm that the expenditure proposals do not include for assets for which developers will either contribute to the cost of provision or will build and hand over to the Agency.



## 6 References

1. Capex Asset Management and Opex Review Sydney Catchment Authority Final Report, February 2005, Atkins.
2. Email from IPART to Atkins 24 June 2005, 'Materiality'
3. Sydney Catchment Authority - Draft Report and Draft Determination, IPART, June 2005
4. Sydney Catchment Authority Response to Atkins Cardno Information Request, June 2005
5. Sydney Catchment Authority Special Information Return (SIR) March 2005
6. Sydney Catchment Authority Supplementary Submission to IPART March 2005
7. 2004 Annual Information Return and Special Information Return modified 16 November to IPART, Sydney Catchment Authority
8. Response to Atkins draft Supplementary Report, SCA July 2005
9. SCA Response to Atkins query, SCA July 2005

## 7 Appendices

***Appendix A: PROJECT BRIEF***

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## Consultancy Agreement

The Tribunal will extend the existing Agreement to include a review of supplementary capital expenditure and operating expenditure proposals made by Hunter Water Corporation (HWC), Sydney Water Corporation (SWC) and Sydney Catchment Authority (SCA). Consistent with the objectives outlined in the Agreement, this involves assessing for each agency's supplementary submission:

1. the efficiency of the businesses' estimates of additional operating expenditure for the period from 2005/2006 through to 2008/2009, that is, from 1 July 2005 until 30 June 2009.
2. the efficiency of proposed additional capital expenditure for the period from 2005/2006 to 2008/2009.

Atkins will also be required to participate in a roundtable discussion of issues raised in the primary and supplementary expenditure reviews. The Tribunal has reviewed the findings presented in Atkins final report and each agency's response to the findings. A roundtable discussion will provide an opportunity for each agency to debate outstanding issues regarding Atkins recommendations and methodology with the consultant in the presence of the Tribunal.

The Tribunal offers to extend the Agreement as follows:

1. Schedule 2 (Services)

- (a) In Operating Expenditure include:

For this aspect of the review, in respect of each agency's supplementary operating expenditure proposals the consultant will be specifically required to:

- (i) provide the consultant's opinion as to the efficiency of the agency's proposed additional level of operating expenditure for each year between 2005/2006 and 2008/2009 and provide for each year estimates, with supporting reasons, of the level of operating expenditure that is required to efficiently undertake their regulated functions.
    - (ii) identify and analyse any additional transfers of costs between regulated and unregulated parts of the water business, subsidiary or parent agency or businesses and comment on any such transfers which in the opinion of the consultant are inappropriate.

- (b) In Capital Expenditure include:

For this aspect of the review, in respect of each agency's supplementary capital expenditure proposals the consultant will be specifically required to:

- a) provide an opinion as to the efficiency of each agency's capital expenditure program for the period from 2005/2006 to 2008/2009 and provide for each year estimates, with supporting reasons, of the level of capital expenditure that the consultant considers efficient in order to undertake each agency's business and functions.
    - b) identify and segregate the capital works projects associated with assets for which developers will either contribute to the cost of provision or will build and possibly hand over to the agency and reconcile actual and proposed developer

funded capital expenditure with forecast capital expenditure in Development Servicing Plans.

(c) In Outputs include:

The required outputs from the supplementary consultancy are:

- a final written report for each agency which addresses the objectives of the consultancy;
  - discussions and meetings with water agencies, the Tribunal and/or Tribunal Secretariat;
  - participation in roundtable discussion with the Tribunal and water agencies on issues and findings from both the primary and supplementary reviews.
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