Chapter 9

Operating expenditure

Melbourne Water's planned operating expenditure for waterways and drainage services totals approximately $453.5[1] million over the 2008 regulatory period.

Forecast annual operating expenditure will remain relatively stable, which reflects initiatives to reduce costs and improve efficiency and service performance. This is despite upward pressures on costs that include meeting new regulatory obligations, maintaining an expanding asset base and higher industry wide costs.

This chapter outlines Melbourne Water's proposed operating expenditure [2] for waterways and drainage services over the 2008 regulatory period, the primary drivers of planned increases and proposed initiatives to achieve efficiency savings in the context of the total business. The expenditure forecasts are based on waterway outcomes, actions and demand forecasts described in Chapters 5 and 6 and are used in determining revenue requirements in Chapter 11. The forecast operating expenditure has been developed through the planning processes described in Chapter 7 which ensure expenditures are aligned to business strategies and external requirements and is consistent with the proposed capital expenditure in Chapter 8. Appendix 1 provides a summary of obligations, activities and expenditures for each major program area.

9.1 Background

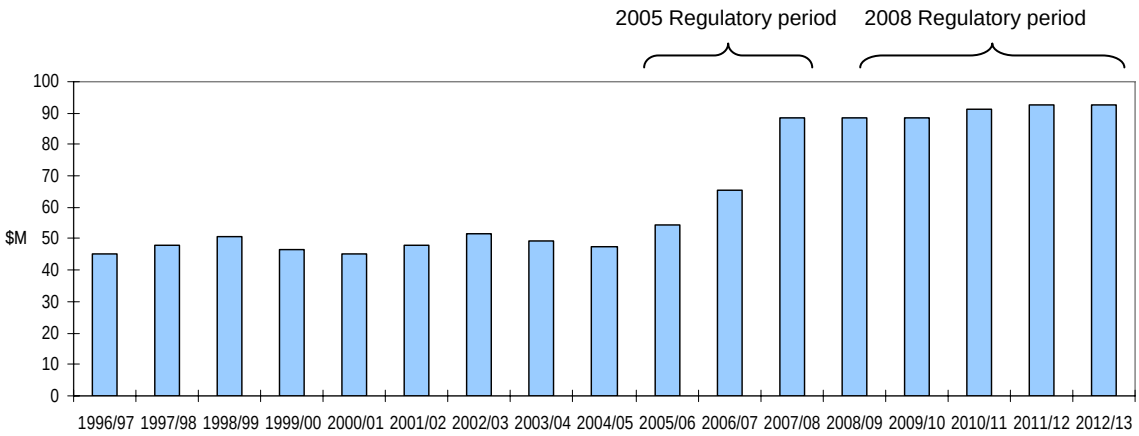
Melbourne Water as a business has achieved significant efficiency savings since the water industry was disaggregated in 1995. These savings have been achieved on an increasing asset base and with growing government, regulatory and customer requirements. These reductions have been captured through initiatives such as competitive tendering, streamlined business processes, enhanced business systems and lower power and chemical costs.

In relation to waterways and drainage services, operating costs have remained relatively stable in real terms over the period 1996/97 to 2004/05 as illustrated by Figure 9.1. The step increase in operating costs in 2005/06 is primarily due to the introduction of services in Melbourne Water's extended boundary area and commencing waterway improvement activities to meet targets included in the Regional River Health Strategy. Section 9.2.2 provides an explanation around the step increase in 2007/08.

[1] All expenditures in this chapter have been expressed in 2006/07 dollars.

[2] Total operating expenditure includes operating, maintenance and administration costs.

Figure 9.1: Waterways and drainage actual and forecast operating expenditure – 1996/97 to 2012/13

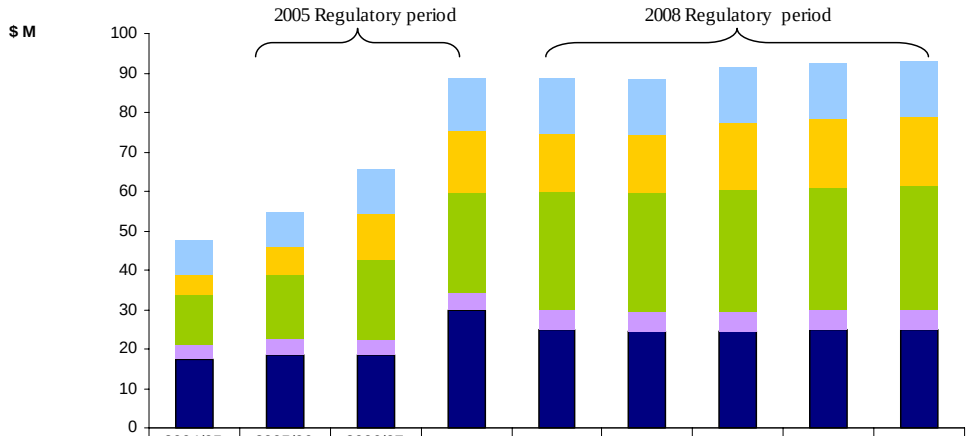


9.2 Operating expenditure forecasts

9.2.1 Waterways and drainage

Forecast operating expenditure over the 2008 regulatory period for waterways and drainage services is $453.5 million. This includes corporate overhead allocations of $123.4 million (27% of total operating expenditure) which includes costs associated with functional areas such as information technology, human resources, finance, risk management, insurance and research and technology. Average annual expenditure over the 2008 regulatory period is approximately $91 million compared to $70 million over the 2005 regulatory period. Figure 9.2 illustrates this on an annual basis, for each major operating program. Appendix 1 provides a summary of obligations, activities and expenditures for each major program area.

Figure 9.2: Waterways and drainage operating expenditure by program – 2004/05 to 2012/13

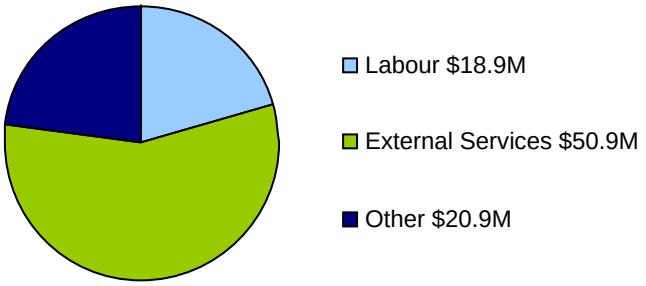


	2004/05 Actual	2005/06 Actual	2006/07 Actual	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Drainage & Flood Protection	8.5	8.5	11.2	13.2	14.1	14.0	14.0	14.1	13.9
Stormwater Quality	5.4	7.1	11.7	15.9	14.5	14.7	16.8	17.5	17.4
Waterways Condition	12.6	16.4	20.3	25.0	30.2	30.4	31.0	31.1	31.5
Land Development	3.5	4.3	3.9	4.8	5.1	4.9	5.0	5.0	5.0
Corporate Overhead Allocation	17.5	18.4	18.5	29.7	24.7	24.5	24.4	24.8	25.0
Product Total	**47.5**	**54.6**	**65.6**	**88.6**	**88.7**	**88.4**	**91.2**	**92.4**	**92.8**

Waterways and drainage operating expenditure is expected to increase over the 2008 regulatory period, on average, by approximately 0.9% per year relative to 2007/08. A key driver of the increase in operating expenditure is meeting new obligations (see Section 9.2.2).

Figure 9.3 shows the average annual composition of the proposed operating expenditure over the 2008 regulatory period by resource input. The low level of mechanisation associated with waterway and drainage services means that expenditure on energy and materials is less than 1% of waterways operating costs. External services represent the majority of average annual operating expenditure which will continue to be subject to contracting and competitive tendering over the 2008 regulatory period. Major contract activities include maintenance, repairs and grass cutting.

Figure 9.3: Average annual waterways and drainage operating expenditure by resource input – 2008/09 to 2012/13

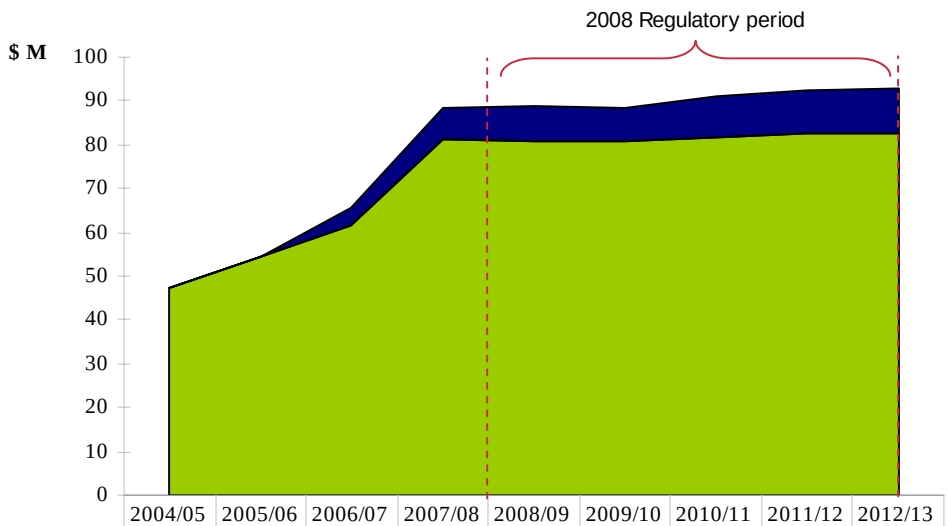


Note: Other includes materials, information technology, fees and charges, transport, and land tax.

9.2.2 New obligations and business as usual expenditures

Over the 2008 regulatory period operating expenditure associated with new regulatory obligations is forecast to increase, while expenditure associated with business as usual activities will remain comparatively stable relative to 2007/08 (see Figure 9.4).

Figure 9.4: New and business-as-usual operating expenditure – 2005/06 to 2012/13



	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
New Obligations	-	0.3	3.8	7.3	8.0	7.7	9.3	9.9	10.1
Business as Usual	47.5	54.3	61.8	81.2	80.6	80.7	81.9	82.5	82.8

The significant increase in operating expenditure for 2007/08 is mainly due to the continued phase-in of waterways management and drainage services to Melbourne Water's extended boundary areas ($6.6 million), one-off billings and collections costs associated with implementing rate reforms in the existing waterways and drainage boundary area ($2.8 million) and meeting requirements under new obligations ($3.5 million).

New obligations

As discussed in Chapter 4, the Commission has defined new obligations as those that come into effect from 1 July 2008. Melbourne Water considers that a supplementary approach is required to define new obligations and has included obligations which came into effect within the 2005 regulatory period and which were not included in the 2005 Water Plan.

New obligations coming into effect from 1 July 2005, and which were not included in the 2005 Water Plan were outlined in Chapter 3. Operating expenditure planned for these new obligations over the 2008 regulatory period includes:

- Managing environmental flows in line with newly established Environmental Entitlements ($2.9 million)
- Implement the final stages of programs identified in the Yarra River Action Plan to reduce the environmental impact of stormwater on waterways in urban areas ($6.9 million)

Operating expenditure to meet new obligations coming into effect from 1 July 2008 includes:

- Undertaking load reduction programs to remove a range of pollutants from stormwater and catchment run-off to meet targets in the Waterways Water Quality Strategy and the 2007 Waterways Operating Charter ($30.2 million)
- Implementing flood protection measures to reduce currently known intolerable flooding risks to protect public health and safety, property and infrastructure as set out in the 2007 Waterways Operating Charter ($4.9 million).

Business as usual activities

Business as usual expenditure is forecast to remain relatively stable over the 2008 regulatory period in absolute terms and, when adjusted for growth, is expected to fall by at least 1% per year relative to 2007/08. This reflects initiatives expected to yield ongoing efficiency savings (see Section 9.4) and is in spite of forecast higher industry wide unit costs.

In terms of industry wide unit costs, market determined price increases will impact on Melbourne Water's operating expenditure estimates for both new obligations and business as usual activities over the 2008 regulatory period. In particular:

- Contract rates are forecast to increase by more than the consumer price index (CPI), as reflected by the anticipated movements in Melbourne Water's two largest contracts for civil and mechanical and electrical maintenance
- Labour rates are forecast to increase by more than CPI, based on current movements in the labour market and the likely outcome of Enterprise Agreement negotiations
- Material prices will increase broadly in line with CPI movements, although there will be some significant one off changes where contracts are renegotiated and there have been significant market movements since the contracts were signed.

Increases for waterways and drainage business as usual activities over the 2008 regulatory period, relative to 2007/08, are driven by:

- Higher labour costs based on current movements in the labour market, and additional headcount required to deliver services to extended areas ($11.5 million)
- Higher civil maintenance costs ($20.7 million) due to the:
  - increasing size of Melbourne Water's waterways and drainage asset base
  - assets experiencing a periodic increase in activity (e.g. the need for de-silting recently constructed wetlands, along with increased riparian management activities to ensure that the condition of vegetation near rivers and creeks is maintained
  - above CPI increases in contract rates influenced by market conditions.

As noted in Chapter 3, a key driver of increased operating expenditure in 2007/08 is the one off cost associated with waterways and drainage rate reform in Melbourne Water's existing boundary areas ($2.8 million) and the one off cost associated with implementing new systems and billing agreements in the extended boundary areas ($5.1 million).

Therefore, in 2008/09 corporate operating expenditure decreases and is lower than expenditure would have been in 2007/08 without these one off costs.

Provision of waterway services to Melbourne Water's extended areas will lead to business as usual costs of $41.0 million over the 2008 regulatory period.

9.3 Benchmarking operating efficiency

Melbourne Water participates in benchmarking to:

- Measure and assess its performance
- Improve its business performance.

In striving to continuously improve operating efficiency and customer service, Melbourne Water monitors best practice and innovation, both within and outside the water industry, and participates in national and international benchmarking studies. This includes a rolling program of process benchmarking of Australian and New Zealand businesses conducted by the Water Services Association of Australia (WSAA).

Melbourne Water as a business has generally performed well in benchmarking studies, reflecting its ongoing drive for continuous improvement and operating efficiency. Whilst there are no direct comparators to benchmark Melbourne Water's waterways and drainage services [3], areas for improvements and best practice identified through benchmarking water and sewerage activities are applied to waterways and drainage services where transferable. These improvements are described in greater detail below.

Process benchmarking

Melbourne Water has focused on those areas of process benchmarking that are relevant to a wholesale bulk supplier and have the greatest impact on current and expected future costs. Recently, it has been involved in benchmarking studies examining the processes associated with mechanical and electrical maintenance and asset management. Melbourne Water has also reviewed its capital planning and delivery processes against industry best practice.

[3] Responsibility for waterway and drainage services at a state and national level is generally shared between a number of authorities including Catchment Management Authorities, State and local governments and Water Authorities

Melbourne Water has also participated in a benchmarking study on shared/corporate services[4]. The results of these benchmarking studies are outlined below and demonstrate Melbourne Water's operating efficiencies in these areas.

Mechanical and electrical maintenance

In 2006, on behalf of the WSAA, UMS-GHD completed a study of mechanical and electrical maintenance activities. This study involved 18 major Australian urban water businesses and overseas water utilities (from New Zealand and the United States). The areas covered by this benchmarking study included breakdown maintenance, scheduled maintenance and renewal maintenance for:

- Water and sewerage pumping stations
- Water and sewerage treatment plants
- Water disinfection plants.

The key outcomes from this study included:

- Melbourne Water was in the overall leading practice group
- Only 1% of prospective savings were identified for Melbourne Water – only one other participating authority was lower than this
- Comparison of results with the 2001 Mechanical and Electrical Maintenance Performance Benchmarking study highlighted that Melbourne Water has realised a 16% increase in efficiency on a composite cost performance
- Consistent alignment of results across all benchmarked categories and activities that indicates the overall strength of Melbourne Water's approach to mechanical and electrical maintenance practices.

The strong result of a 16% efficiency gain from the period of 2001 – 2006 can be attributed to:

- The implementation of Melbourne Water's contract strategy
- An increased focus on asset management, both in general and specifically in relation to understanding and management of required levels of service of assets.

Although these results are confined to mechanical and electrical assets, the strategies and improvements applied to the mechanical and electrical asset base are also applied to the remaining Melbourne Water asset base (including waterways and drainage assets) as part of the integrated Melbourne Water Asset Management System. For example, a review of service level requirements for drainage assets was undertaken as part of implementing Melbourne Water's Asset Management Strategic Framework. The review identified a deficiency in the delivery method for inspecting and assessing the condition of the underground drainage network which to date has been undertaken by specialist service providers using Closed Circuit Television technology. By purchasing camera equipment and providing the respective training for maintenance service providers, Melbourne Water has improved the annual condition assessment of drainage assets and expects to achieve operational expenditure savings of $0.12 million per annum.

[4] This study was undertaken by WSAA in 2003/04. At this stage, WSAA does not plan to repeat or update this study.

Asset benchmarking

In March 2004, Melbourne Water participated in a benchmarking review of asset management practices conducted by WSAA. The results of this study are discussed in Chapter 7 (see section 7.3) and showed that Melbourne Water as a business operates its asset management process at, or close to, best practice within the water industry.

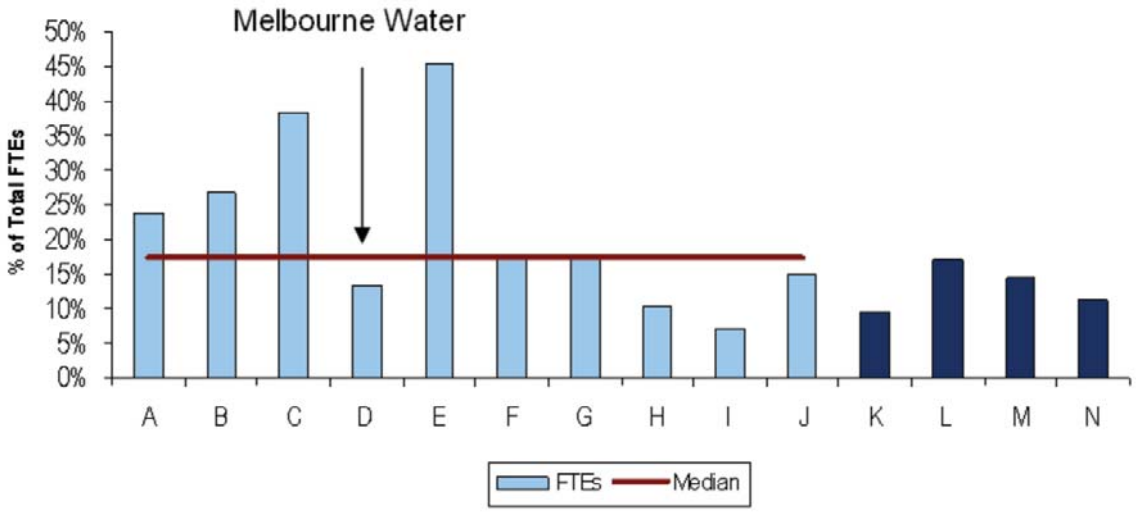
Planning and delivery processes

In addition to formal benchmarking studies, Melbourne Water seeks opportunities to review its planning and delivery processes against industry best practice to identify efficiency improvement initiatives. Most recently this has included a review of Melbourne Water's capital planning and delivery processes by KPMG. The improvements made to date as a result of the review are discussed in Chapter 7 (see Section 7.2).

Corporate services

In 2003, Melbourne Water participated in a WSAA benchmarking study around corporate services. In this study, WS Atkins Planning and Management Consultants benchmarked corporate services provided by ten Australian water businesses including finance, human resources, information technology and communications. As illustrated in Figure 9.7, Melbourne Water has a relatively small number of corporate staff compared to other Australian and overseas water businesses. The study also showed that Melbourne Water's corporate service areas provide high levels of service at low cost with each service area ranked within the top quartile of participating businesses.

Figure 9.7: Corporate employees as a proportion of total



Note: Businesses A to J are Australian water businesses; K to N are comparable overseas water businesses.
Source: Water Services Association of Australia 2004

Melbourne Water demonstrated best practice in human resources, including implementing performance cultures along with management development programs, financial management reporting and procurement practices.

The Melbourne Water focus on continuous improvement includes:

- A long-term program (Preferred Culture Program) to build a more constructive and progressive culture within Melbourne Water
- Improvements in recruitment and staff development programs
- Improved human resources related processes and workflow
- Increased technical and personal training to progress the individual development of employees
- Deployment of a new Safety Management System.

Since this study, Melbourne Water has maintained its relatively small number of corporate staff. In 2007/08, business service staff are forecast to represent approximately 11.2% of total staff [5]. This includes an increase in business service staff to perform human resource functions that were previously not done in-house and which will generate efficiencies. Over the 2008 regulatory period, the ratio of business service staff to total staff will remain stable and is forecast be 11.0% in 2012/13.

9.4 Efficiency gains and initiatives

Melbourne Water pursues operating efficiencies in the context of maximising value and managing risks. This requires a balance to be struck between seeking immediate cost savings and the need to:

- Minimise costs over the asset life cycle by identifying the most efficient mix of capital and operating expenditure
- Meet environmental or community requirements and minimise the risk of injury to Melbourne Water employees or contractors
- Ensure that all significant risks are identified, understood, allocated to the party best placed to manage them and, to the extent possible, are mitigated.

As noted above, while Melbourne Water as a business has achieved significant efficiency improvements in the past, it strives for continuous improvement and innovation. Melbourne Water has implemented a range of efficiency initiatives since the Commission's 2005 price determination, including those identified in its 2005 Water Plan. In relation to efficiencies gains detailed in its 2005 Water Plan for waterways and drainage services, Melbourne Water has achieved the $0.14 million cost saving from implementing a web-based system for providing property flood level information online through two specialist agencies.

Additional efficiency savings have also been generated through improved information technology systems and continued use of community grant based programs to reduce operating costs for waterway management. This is illustrated by the case studies below.

[5] This includes Finance, Information Technology, Human Resources, and Risk Management staff.

Case Study:

ATLAS – Integrating and improving development responses

Melbourne Water provides flood information and requirements for land development to local governments and the development industry as part as part of its responsibilities as a statutory referral authority for planning permit applications and floodplain management authority. A corporate based system, ATLAS, is used to process town planning and building permits, requests for feasibility advice and enquiries on flood levels.

The computer-based job tracking system was comprehensively upgraded in November 2006 to assist Melbourne Water to deliver integrated and coordinated responses by highlighting applications that require input or advice from teams within Melbourne Water on issues such as river health, asset management and water quality. The system co-ordinates responses from areas of the organisation that advise on development referrals and automates responses including the calculation of developer contributions where applicable.

By improving business processes, Melbourne Water has reduced input costs of $0.13 million per annum, improved response times and is able to provide customers with a better service by streamlining the approval process, ensuring there is a consistent approach to assessing developments in areas of flood risk.

Case Study:

Community grants programs

Melbourne Water's grants program provides assistance to the community to carry out works on private or public land with waterway frontage to protect and improve the health of rivers and creeks in the Port Phillip and Westernport region. The program funds affordable, non-technical works that include tree planting, installing fencing, revegetation projects and weed control.

Melbourne Water's contribution to the joint projects is mainly in relation to the cost of materials. Most grants require that the participants contribute a minimum of 50% of the total project cost, either financially or by contributing time through project management and/or labour (which includes arranging the delivery of works and ongoing maintenance of the project site). This enables Melbourne Water to meet its service obligations in a cost effective manner while also engaging local communities.

The grants program results in land managers, community groups, local government and agencies developing practical skills, creates partnerships, promotes community engagement in waterways issues and increases the quantum and robustness of river health outcomes.

Melbourne Water has a demonstrated history of implementing innovations to achieve operating costs savings. Melbourne Water plans to continue this trend over the 2008 regulatory period with its operating expenditure proposal reflecting initiatives expected to yield ongoing savings.

As 70% of Melbourne Water's total operating expenditure is incurred through contracted services, a Planning Framework and Contract Strategy has been developed to increase the value provided by contract maintenance and goods/capital acquisition to ensure that:

- Capital and operating costs are considered together to minimise life cycle costs
- The mix of internal service provision versus externally contracted services is reviewed periodically and optimised
- Appropriate incentive arrangements are in place to align Melbourne Water and service provider objectives to promote improvements in service quality and reduce costs
- Strategic purchasing and bundling of inputs are considered to reduce total operating costs.

Consistent with this strategy, Melbourne Water's maintenance contracts are developed based on:

- Building relationships with contract service providers and developing contracts that align commercial objectives and include performance based financial and, where appropriate, non-financial incentives (e.g. increasing the scope or duration of the contract)
- Consolidating maintenance contracts for generic services where appropriate
- Maintaining separate contracts for highly specialised services
- Exercising caution in contracting out core functions or where outcomes and performance are difficult to define.

Over the 2008 regulatory period, examples of anticipated business wide savings to be achieved through improved contract processes include:

- Restructured contractual arrangements for mechanical and electrical maintenance leading to targeted savings of up $0.2 million per year. In addition, savings will be achieved through more efficient contractor performance under these arrangements, targeted at up to $0.2 million per year
- Renegotiation of the telecommunications supply contract resulting in cost savings of approximately $0.3 million per year.

As the Contract Strategy is a corporate wide initiative the anticipated savings will extend to waterways and drainage related contracts.

In terms of efficiency improvements, Melbourne Water notes that using the methodology proposed in Chapter 4 it will more than achieve the minimum of 1% per year productivity improvement on growth adjusted business as usual expenditure. This reflects an efficiency improvement relative to 2007/08, consistent with the Commission's advice in its March 2007 Guidance Paper that it proposes to establish a business as usual level of cost derived from the current expenditure incurred by businesses at the end of the regulatory period.