

MELBOURNE WATER CORPORATION  
1998/1999 ANNUAL REPORT



Melbourne Water

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*The birds illustrated on the front cover are the  
Great-billed Heron and the White Egret.*

# MELBOURNE WATER CORPORATION

## 1998/1999 ANNUAL REPORT

*Melbourne Water is a statutory corporation  
wholly owned by the Government of Victoria.  
The responsible Minister is the Hon. Patrick McNamara,  
Minister for Agriculture and Resources.*

### VISION

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*To be a leader in urban water cycle management*

### PURPOSE

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*Melbourne Water exists to add value for its customers and  
the community by operating a successful commercial business  
which supplies safe water, treats sewage and removes  
stormwater at an acceptable cost and in an environmentally  
sensitive manner.*

### VALUES

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*Melbourne Water's values determine its behaviour as an  
organisation. The values are innovation, cooperation, respect,  
enthusiasm, integrity and pride. They are a guide to  
employees on how they should conduct their activities.  
Through embracing and abiding by the values, employees  
demonstrate to others the principles by which Melbourne  
Water conducts its business.*

# CHAIRMAN'S REPORT

*During the year Melbourne Water produced a solid financial result and completed several major projects for the long-term benefit of our customers and the community.*



In 1998/99 net surplus after tax was \$112.8 million compared with \$160.6 million in the previous year. The results reflect the full year impact of the Victorian Government's pricing reforms, which ultimately reduced the cost of water and sewerage services.

Melbourne Water's total revenue for the year was \$449.6 million. This included \$305.4 million from the provision of bulk water and sewerage services to the retail water companies, \$93.5 million from drainage rates, \$19.1 million from developer contributions and \$16.6 million from the sale of non-core assets. The dividend to the Victorian Government was \$106.2 million.

During the year, Melbourne Water announced a \$120 million upgrade to the Western Treatment Plant. The effect of this upgrade will be to improve the long-term health of Port Phillip Bay by reducing nitrogen loads. The upgrade will also result in the availability of an abundant supply of recycled water suitable for irrigation. A further component of the project is the installation of membrane lagoon covers that will improve air quality and energy efficiency and reduce greenhouse gas emissions.

The CSIRO completed a major research project for Melbourne Water. The study examined the environmental impact of treated effluent from the Eastern Treatment Plant discharged to Bass Strait. The CSIRO report included options for improving sewage treatment and for effluent recycling. Melbourne Water is working closely with the Environment Protection Authority to identify the most environmentally sound option for the future at the least cost to the community.

In 1998/99 Melbourne Water received \$3.5 million funding through the Commonwealth Government's Natural Heritage Trust to develop a series of wetlands in Melbourne's south-eastern growth corridor. The Corporation is also contributing to the project that will reduce the impact of stormwater and urban run-off into Port Phillip Bay.

The complex and technically challenging North Western Sewer project was completed on schedule and \$28 million under budget after eight years of construction. The new \$225 million sewer has eliminated sewage spills into the Maribyrnong River and Moonee Ponds Creek in extremely wet weather, improving the water quality in those waterways.

During the year the century old Epsom Road Main Sewer was relined using a technique that diverted sewage flows into the North Western Sewer while work proceeded and therefore minimised disruption to the community during the construction period.

Melbourne Water received an award in May 1999 from the Cooperative Research Centre Association for the development of new technology to trace and control pollutants in the Tarago Reservoir.

A significant achievement was the completion of Melbourne Water's long-term plan that makes full use of the synergies that can be achieved within the main operating groups of water, sewerage, and waterways and drainage. The long-term plan, which was discussed with the Victorian Government, the retail water companies and the regulators, will focus on the urban water cycle.

This approach will ensure that vital planning decisions take into account the interdependencies and the sensitivities of Melbourne's water supply, sewerage and waterways and drainage systems. It will also encourage an increased emphasis on the commercial and environmental benefits arising from the most appropriate use of Melbourne's water resources.

I want personally to record my appreciation of the efforts of all Melbourne Water employees for delivering another year of excellent results. I also thank fellow Board members for their contributions during the year. Judith King retired from the Board after nine years' service and we wish her well and thank her for all she has done during her time with the Corporation.

A handwritten signature in black ink that reads "Christopher Stewart". The signature is written in a cursive style with a large, stylized initial 'C'.

**Christopher Stewart**  
Chairman

When repairs were undertaken to the Epsom Road Main Sewer flows were diverted to the new North Western Sewer. This enabled the project to proceed while minimising disruption on busy Epsom Road.

# MANAGING DIRECTOR'S OVERVIEW

*In 1998/99, Melbourne Water again met its key objectives of providing high quality water, sewerage and drainage services to the community.*



**M**elbourne Water continued to strengthen and review its emergency response procedures and contingency planning in a year characterised by an increased emphasis on risk management.

The incidents in Sydney and at Longford provided a firm reminder that we must continually reassess the way we do business to ensure the most robust checks and balances are in place. What these incidents taught us was that complacency has no place in our business.

Key focus areas in the Corporation's review of its risk management procedures were the Year 2000 issue and crisis management. Melbourne Water's Year 2000 project included an exhaustive testing and remediation program of all critical systems and equipment, and assessment of all critical and important suppliers. The Corporation is Year 2000 ready and confident that it will be business as usual as we move to the new millennium. Melbourne Water's crisis management procedures were enhanced following discussions, workshops and briefings involving experts in the field and industry stakeholders.

Customer service was a high priority during the year and significant progress was made towards finalising the Bulk Services Agreements with the metropolitan retail water companies. The revised agreements set out accountabilities for managing issues such as drinking water quality and trade waste.

As part of its commitment to provide a reliable supply of high quality drinking water to its retail water customers, Melbourne Water completed \$8 million of projects in outer urban areas.

Projects undertaken included the covering of service reservoirs on the Mornington Peninsula, a new water filtration plant at Yarra Glen and three chlorination plants in the outer western suburbs.

Throughout the year, the Corporation was involved in a number of major capital works projects. Positive relationships with local communities are important to the success of these projects and Melbourne Water continued to implement extensive community consultation programs.

In another year of very low rainfall, Melbourne Water and the metropolitan retail water companies worked closely to refine the industry's drought response plan.

The plan uses sophisticated technology to assess a range of data including climate trends and indices and ground and soil conditions to forecast water storage levels in the coming months.

Melbourne Water and its river diversion customers worked cooperatively to manage the restrictions placed on people licensed to divert water from the Yarra and Maribyrnong Rivers for their businesses. The objective was to maintain healthy river flows and these required limits being placed on the volume of water diverted.

Western Water, whose service area includes the townships of Sunbury, Diggers Rest and Macedon, had also been affected by the drought with storage levels in its major service reservoirs being extremely low. In March 1999, Melbourne Water signed an agreement with Western Water to supply up to 200 megalitres a year from the Greenvale Reservoir. The supply will provide Western Water with long-term security of supply.

The dry weather also focused attention on the importance of maximising the use of recycled water. Melbourne Water reviewed its effluent recycling program to identify opportunities for the increased use of this resource. The review found that following the completion of the upgrade to the Western Treatment Plant, there would be an abundant supply of high quality effluent in the Werribee area suitable for a range of agricultural and horticultural purposes. Further initiatives in effluent recycling included the calling for expressions of interest to develop a major recycling scheme for effluent from the Eastern Treatment Plant.

A number of programs were undertaken to increase the knowledge, skills, expertise and safety of Melbourne Water's employees. The majority of Melbourne Water workplaces are now SafetyMAP-accredited by the Victorian WorkCover Authority, and the aim is to have them all accredited during 1999/2000.

Our achievements during the year are a credit to the dedication and commitment of our employees. These results were possible only because our people tackled challenges together, with resolve. I am confident that we are well placed to build on these achievements in the new millennium.

A handwritten signature in black ink, appearing to read 'Brian Bayley'. The signature is stylized and fluid.

**Brian Bayley**  
Managing Director

Melbourne Water's Upper Yarra Reservoir storage fell as low as 42 per cent of capacity during the 1998/1999 summer.

# BUSINESS PERFORMANCE OVERVIEW

*In 1998/99 Melbourne Water developed a new long-term plan.*

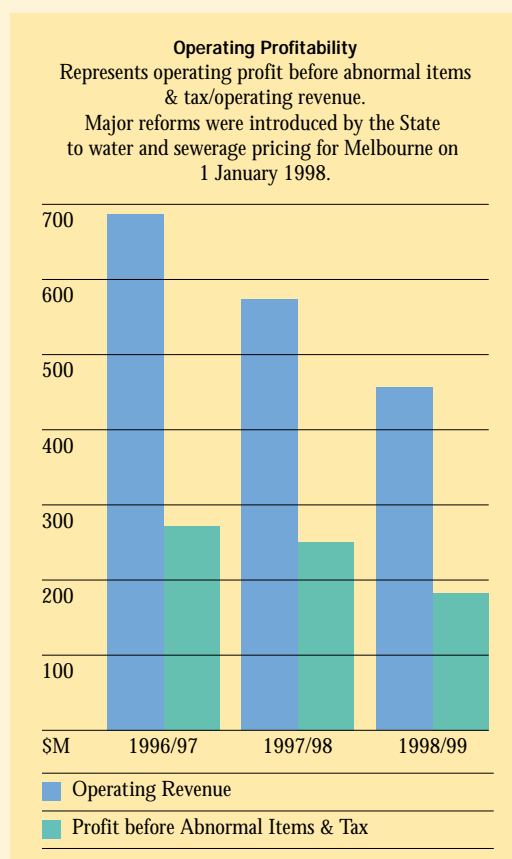
*The planning document titled Catchment to Coast – Making the Connections in the Urban Water Cycle, sets out the strategic directions to enable Melbourne Water to continue to improve its performance in the key operational areas of water, sewerage and waterways and drainage.*

*The long-term plan recognises the synergies between the functions of Melbourne Water's operational groups and the important role they have in the effective management of the urban water cycle. The strategic directions are outlined under four corporate objectives: Maximise Shareholder Value, Achieve Excellent Customer Service, Be a Leader in Environmental Management, and Fulfil Our Community Obligations.*

*The following section highlights Melbourne Water's performance in 1998/99 in meeting these corporate objectives.*

## Maximise Shareholder Value

- > Progress continued to be made with the Government and the metropolitan retail water companies on significant long-term industry issues such as tradeable entitlements.
- > A continued focus on debt reduction resulted in interest costs being reduced by \$43 million.
- > Efficiencies continued to be made and overall operating costs have been reduced by more than 32 per cent since 1995/96.
- > The international credit ratings agency, Standard and Poor's, upgraded Melbourne Water's credit rating from AA to AA+.
- > The Year 2000 project reached its final stage, with assets and equipment tested and the Corporation Y2K ready.
- > Revenue growth was strong, with higher than planned revenue in most areas of the business and cash flow more than \$13 million above expectation.



> An agreement was signed to supply Western Water with up to 200 megalitres a year from Greenvale Reservoir.

> Major infrastructure projects were completed to improve reliability and structural integrity of assets, including Yan Yean Reservoir, the North Western Sewer and the Hanna Street Main Drain.

> Risk management procedures were reviewed, including Melbourne Water's crisis response plan.

#### Achieve Excellent Customer Service

> More than \$8 million was spent on drinking water quality projects in outer urban areas.

> A major works upgrade to improve water quality and security of supply began in the Mornington Peninsula.

> Customer reporting to the metropolitan retail water companies was enhanced, including comprehensive monthly water quality data and weekly updates on water storage.

> Partnering arrangements were established with City West Water and South East Water.

> Work continued on making drainage and flood risk data available electronically to improve service to local councils, property owners and property developers.

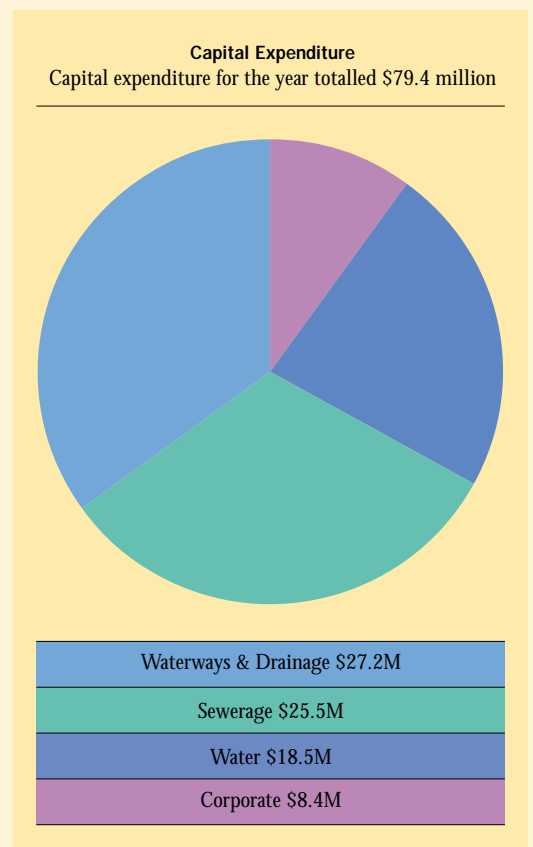
> A revised land development manual was released to provide more comprehensive information to the development industry. The manual was placed on the Melbourne Water Internet site.

> Melbourne Water completed a \$2.5 million drainage survey which provided information on flood risks that councils began adopting into planning schemes as special building overlays.

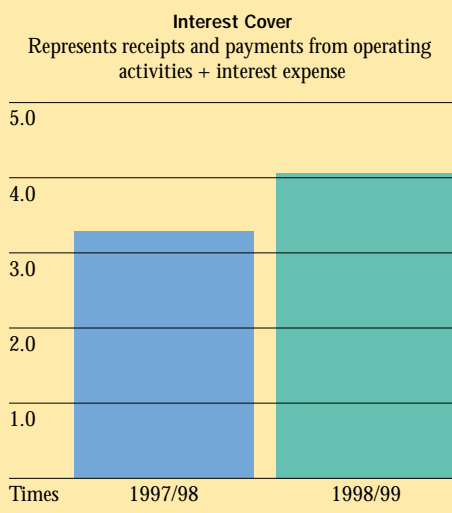
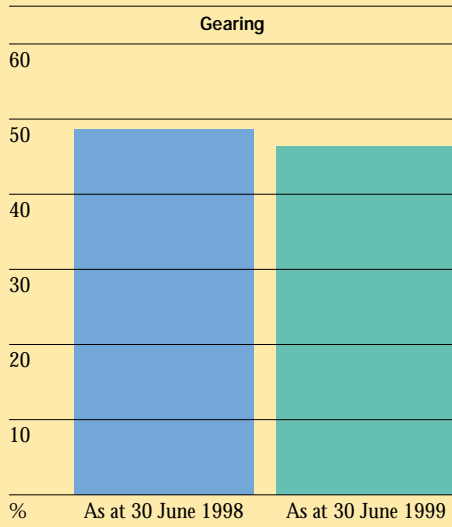
#### Be a Leader in Environmental Management

> A \$120 million upgrade to improve effluent quality at the Western Treatment Plant was announced by the Minister for Agriculture and Resources.

> Funding from the Natural Heritage Trust was secured to help construct one of Australia's largest wetland projects.



**Debt**  
 The total book value borrowings amounted to \$1,267.4 million (\$1,281.8 million in 1997/98). The reduction reflects the \$337.0 million debt restructure and ongoing program of debt repayment. The gearing percentage at 30 June 1999 improved to 45.9% compared to 47.1% at 30 June 1998 as a result of these initiatives.



> The CSIRO's \$1.3 million Effluent Management Study was completed. The study assessed the environmental impact of effluent discharge into Bass Strait.

> The Western and Eastern Treatment Plants achieved a high level of environmental compliance (100 per cent and 99.6 per cent respectively for effluent discharge).

> More than 442,000 trees, plants, shrubs and other vegetation were planted to improve the health of waterways, protect stream banks and create wetlands to treat stormwater run-off.

> Six fishways were constructed that will enable large numbers of migratory native fish to access important feeding and breeding habitats.

#### Fulfil Our Community Obligations

> Community relations guidelines were finalised for contractors to ensure strong links with business and consultation with residents, community and environmental groups.

> An external reference group was formed to establish an operating charter for waterways and drainage.

> Extensive community consultation was undertaken for capital works projects and major environmental studies.

> Public accountability was a high priority, with data on water quality, research projects and environmental compliance available on the Internet.

> A consultative group helped shape the design and development of three wetlands constructed at the Woodlands Industrial Estate in Braeside.

> A total of 4200 school students went on organised tours of the Eastern and Western Treatment Plants and another 600 people toured the plants on visitor open days.

> Melbourne Water assumed accountability for Waterwatch, in which school and community groups monitor and learn about the health of waterways, and extended the program throughout the metropolitan area.

Cardinia Reservoir has a total capacity of 270,000 megalitres.  
Information on Melbourne Water's reservoirs, storage levels and water  
quality data was updated regularly on the Internet.

# MAXIMISE SHAREHOLDER VALUE

*Melbourne Water consolidated its financial gains of recent years by continuing to reduce debt and operating costs and increase revenue.*

*The Corporation also continued to seek opportunities to improve and streamline business performance.*

## **A solid business performance**

Melbourne Water made further improvements to its business in 1998/99 in a year of solid commercial performance.

Interest costs fell \$43 million during the year due to the full-year impact of the Government's debt restructure of 1998 and the

Corporation's continued focus on repaying debt. This was reflected in the Corporation's gearing which reached 45 per cent, down from 72 per cent four years ago. In the same period, interest costs were reduced by 66 per cent. Cash from operations for the year is now more than four times interest costs.

A number of initiatives contributed to efficiency improvements in the year ended 30 June 1999, including streamlining of operations in sewerage, water and commercial services. Operating costs were reduced by 5.9 per cent during the year, and since 1995/96, overall operating costs have been reduced by more than 32 per cent.

Figures published by the Water Services Association of Australia in *WSAA Facts* (January 1999) compared Melbourne Water's wholesale operating costs with those of five major water companies or authorities in other States in 1997/98. Melbourne Water had the lowest operating costs for sewerage and the second lowest for water.

The international credit ratings agency Standard and Poor's upgraded the Corporation's credit rating from AA to AA+. This followed a similar upgrade the previous year. Standard and Poor's noted: "The rating change reflects a continued improvement in the company's financial position."

During the year, the Corporation delivered strong revenue growth, with a buoyant property market leading to opportunities to achieve good returns for the sale of surplus property and a high level of activity in the development industry increasing drainage revenue. Higher than planned bulk water sales were achieved due to the continuing dry conditions.

Risk management was a high priority during the year, and procedures were reviewed, including Melbourne Water's crisis response plan.

Plans were further developed for the merging of five control rooms, centralising control of the water, sewerage and stormwater systems.

An agreement was signed to provide up to 200 megalitres of water a year to Western Water which serves communities north-west of Melbourne. Western Water will build a

\$6.5 million, 10 kilometre pipeline between Sunbury and the Melbourne Water system.

Agreement was reached in principle with another customer, Southern Rural Water, on water entitlements.

Systems Controller Cal Stanton-Smith tracks water and sewage flows at the Brooklyn control room.

Melbourne Water was involved in research, improvement, and community awareness projects to protect and improve water quality in the Yarra River.

## YEAR 2000 PROJECT

*During the year, the major element of the risk management program was the Year 2000 project. The Corporation is year 2000 ready and confident that its customers will be supplied with water, sewerage and drainage services as usual during the transition to the new millennium.*

Melbourne Water's business is highly automated and the Corporation has spent more than \$4 million preparing for the year 2000 date change.

The Year 2000 project assessed, tested and, where necessary, rectified critical systems and equipment in all areas of the business, including the SCADA computer system that links, controls and monitors water and sewage flows, control equipment, telemetry and instrumentation, voice and data communications, building support systems and business computer systems.

The project included a detailed analysis of the Corporation's supply chain, and all critical and important suppliers were assessed for year 2000 readiness. The project team included technical specialists from within the organisation and external consultants.

Melbourne Water is continuing to work closely with its key retail customers – City West Water, South East Water and Yarra Valley Water – on industry preparedness for the year 2000.

Melbourne Water provides monthly reports to the Victorian Government's Department of Treasury and Finance Year 2000 Risk Management Unit and the accuracy of a report on the Corporation's year 2000 preparedness has been confirmed by PriceWaterhouseCoopers.

Contingency plans were identified during the year and are in place. These cover supplies such as electricity, chemicals and fuel and back-up facilities. Teams of specialist employees will test and monitor systems and equipment and manage communications during the transition to the new millennium. Treatment facilities have back-up power supplies and all systems can be operated manually.

### Year 2000 Systems Compliance

Critical business system name	Description of critical business function	Completion date
SCADA	System control and data acquisition system	June 1999
SODS	Sewer access permit system	May 1999
LDD	Land development database	February 1999
Plan Room	MW asset records database	May 1999
Hydsys TS	Flood prevention package	June 1999
GIS	Geographical information system for asset location	May 1999
DSCM	Drainage scheme creation and maintenance	May 1999
FACS	Financial management software package	May 1999
Chris	Payroll software package	April 1999
AMS	Asset management database	May 1999
Custima	South East Water drainage certificate interface	June 1999
Gentrack	City West Water drainage certificate interface	June 1999
Yarra Valley Online	Yarra Valley Water drainage certificate interface	April 1999
PABX	Telephone exchanges	June 1999
MOCS	Melbourne one call system	July 1999
Water headworks	Reservoir outlets and controls	March 1999
Water transfer	Pipeline valves and controls	March 1999
Water treatment	Disinfection facilities for water supply	March 1999
Sewerage transfer	Pump station and pipeline controls	June 1999
Sewerage treatment	Treatment controls	June 1999
Flood warning	Flood monitoring instrumentation	June 1999

**In preparation for the year 2000, treatment plant facilities have back-up power supplies and all systems can be operated manually.**

Operator David Blanch at the Eastern Treatment Plant's air purification system, which has been upgraded as part of a \$27 million improvement program at the plant.

## RESEARCH, TECHNOLOGY AND INNOVATION

*Sound commercial principles combined with research, technology and innovation provide a firm foundation for capital works projects.*

### **Research builds knowledge base**

Melbourne Water commissions research projects to deliver increased efficiency and productivity, reduce exposure to environmental and public health risks, enhance the organisation's strategic knowledge and obtain information which can provide an input to future regulation.

The value placed on particular projects is based on their cost, risk, urgency, potential savings and importance to government, customers and the community. Melbourne Water spent more than \$2 million on research projects in 1998/99.

Melbourne Water maintained strong links with the water industry at international and national levels. Included in its affiliations are the American Water Works Association and its research foundation, the Water Environment Federation, the International Association on Water Quality, the International Water Services Association and the Australian Water and Wastewater Association.

The Corporation believes that pooling resources and expertise in organisations such as the Cooperative Research Centres enables research to be undertaken that maximises the benefit of funds committed.

For example, Melbourne Water is a sponsor of the \$3 million Water Quality Study being conducted by the Cooperative Research Centre for Water Quality and Treatment, in which 600 Melbourne families are being monitored to gain a further insight into any discernible differences in the health of people drinking filtered and unfiltered water. The methodology for the study, which is expected to be completed by the end of 1999, has been adopted in a similar pilot study in California.

The Corporation's involvement with the Cooperative Research Centre for Catchment Hydrology in a research project on catchment management at the Tarago Reservoir received a technology transfer award. The award, presented by the Cooperative Research Centre Association, recognised the importance of working cooperatively with landowners within the supply catchments to protect water quality in the West Gippsland reservoir.

Melbourne Water strives to increase its knowledge base and in 1998/99 participated in domestic and international conferences on issues including pathogens, wastewater technologies and stormwater treatment.

### **Integrating technology and innovation in capital works**

Melbourne Water has an extensive capital works program that is prioritised after consideration of such factors as public health, legislative requirements, customer obligations, growth, operational efficiencies, asset condition and risk.

In 1998/99 \$80 million was allocated to capital works projects. The challenge in managing a large capital budget is to complete projects on schedule and under budget while minimising disruption to the community.

The century old Epsom Road Main Sewer is located under one of Melbourne's busiest roads servicing the western suburbs and a number of popular public venues such as the Flemington Racecourse. More than two kilometres of the old brick sewer was relined in 12 months during a \$4.4 million project that came in well under budget. Major excavation and traffic disruption was avoided by using innovative technology which allowed sewage flows to be diverted to the North Western Sewer during the construction period. A giant 'plug' was inserted into the Epsom Road Sewer to hold back the sewage and force it to flow backwards into the North Western Sewer.

### **World first technology**

In Box Hill, a challenge arose when one of Melbourne Water's main drains was identified as needing repair following a survey of the drainage system. The Box Hill South Main Drain is about 70 years old and several houses are near or directly on the drainage easement. Excavation was not possible and a solution had to be found that would minimise the risk of structural damage to the houses. A world first technological solution was adopted, in which an hydraulically operated winding machine travelled down the drain, lining it with PVC.

### **Providing flood protection**

Among other major capital works projects completed by Melbourne Water were flood protection and drainage projects at Mt Eliza, Elsternwick Park, St Kilda Road and Mentone. The four-stage, \$10 million project in Mentone was one of the largest flood mitigation works undertaken by Melbourne Water, providing protection for 470 properties. It was completed in December 1998 after four years of works.

### **International expertise in lagoon technology**

Membrane covers, an integral part of the environmental improvement program at Western Treatment Plant, were commissioned during the year. Before the program was finalised overseas visits were made to ensure the organisation was fully aware of the latest lagoon technology.

### **Upgrading Yan Yean**

In 1998/99, Melbourne Water began a \$5 million project to bring Melbourne's oldest water storage, Yan Yean Reservoir, up to the latest engineering standards. An historic valvehouse was dismantled stone by stone to make way for the upgrade. The valvehouse will be reconstructed.

Analytical chemist Rebecca Anthrell assesses the quality of the effluent from the Western Treatment Plant. The independent laboratory, AWT, monitors the performance of the plant to ensure it achieves Environment Protection Authority licence compliance.

## MAJOR CONTRIBUTION BY MELBOURNE WATER EMPLOYEES

*The Corporation achieved a major improvement in its occupational health and safety performance.*

### **Safety record achievement**

In 1998/99 the lost time injury frequency rate fell from 5.0 to 1.8 and the lost time injury ratio reduced from 6 to 2. All major worksites were SafetyMAP accredited by the Victorian WorkCover Authority.

### **Linking remuneration to performance**

Melbourne Water made further progress in 1998/99 in linking remuneration to the performance of the business and the achievement of corporate goals. People employed under the Corporation's Enterprise Agreement received a 2 per cent pay increase

from 1 July 1999.

This recognised the achievement of corporate targets for 1998/99 in the areas of commercial performance, risk management, occupational health and safety and environmental and public health compliance. More than half the Corporation's employees have now signed individual employment agreements, a significant increase over the previous year.

### **Sharing knowledge and involving employees**

Five employee forums were held during the year in which guest speakers presented case studies based on Melbourne Water's values. More than 85 per cent of employees took part in the forums that also gave employees the opportunity to contribute to Melbourne Water's long-term plan and to share knowledge

throughout the business. Regular employee briefings were provided on business performance, issues and initiatives at all worksites during the year and a new monthly information bulletin was published.

An Employee Representative Committee was established. It met for the first time in September 1998 and meets monthly to provide a forum for the views of all employees. The committee is involved in reviewing and commenting on human resources policies, improving participation processes and identifying opportunities for productivity improvements.

### **Employee development**

Melbourne Water undertook many training programs to improve the knowledge and skills of its employees.

Professional development and training courses are contained in career development or work improvement plans for all Melbourne Water employees. A key initiative was aligning the organisation's water supply operator training program to the National Vocational Certificate in Water Resource Management. This gives national recognition of the organisation's skill based training program.

### **Employee profile**

At 30 June 1999, Melbourne Water had 493 employees – 404 (82 per cent) were men and 89 (18 per cent) were women. A year earlier there were 562 employees – 467 (83 per cent) men and 95 (17 per cent) women.

### **Equal opportunity**

Melbourne Water is an equal opportunity employer.

Discrimination, victimisation, and harassment of any kind are unacceptable. During the year, Equal Employment Opportunity management practices were further developed and implemented.

Planning managers Gordon McFarlane and Gerard Thurbon. Forums were organised during the year to enable employees to share knowledge and contribute towards the Corporation's long-term plan.

Some 50 aerators pump oxygen into the sewage lagoon at Western Treatment Plant. Melbourne Water engineers visited treatment plants in North America and South Africa to study the latest in lagoon technology prior to finalising an environmental improvement program for the plant.

# ACHIEVE EXCELLENT CUSTOMER SERVICE

*Melbourne Water has a diverse range of customers including the metropolitan retail water companies, local councils, the property development industry and river diversion permit holders.*

## **Focusing on customer relations**

As with most businesses, Melbourne Water aims to foster positive relations with its customers. The Corporation's key customers for wholesale water and sewerage services are the metropolitan retail water companies – City West Water, South East Water and Yarra Valley Water.

Melbourne Water provides services to drainage rate customers throughout greater Melbourne and to the property development industry and local councils. It also includes among its customers diverters such as market gardeners, farmers, vineyards and businesses who are licensed to take water direct from the Yarra and Maribyrnong Rivers.

Businesses that use recycled effluent from the Eastern Treatment Plant are Melbourne Water customers.

## **Community benefits from industry cooperation**

In 1998/99 a number of initiatives were undertaken to improve customer service by better understanding and meeting customer needs.

Melbourne Water continued to improve the quality of information it provides to the metropolitan retail water companies. Comprehensive monthly reports were published which included detailed information on water quality as well as weekly information on water storage levels. The retail water companies also received briefings on Melbourne Water's involvement in research and development projects.

Melbourne Water and the retail water companies worked towards finalising the review of Bulk Services Agreements. The review focused on stronger performance-based contractual obligations, and providing a clearer, more robust planning framework for the timely delivery of service improvements. The review further developed

responsibilities for the management of drinking water quality and trade waste, and was based on achieving commercial success while meeting customer expectations and regulatory obligations through a cooperative approach.

It is the first time since the retail water companies were established in 1995 that the agreements have been formally reviewed, and they provide opportunities to further enhance relationships with these customers in future.

Workshops were organised during the year with City West Water and South East Water at which partnering principles were established and working relationships further developed. Workshops were also held with South East Water to establish least-cost community solutions for providing sewerage services in urban growth and redevelopment areas.

## **High quality drinking water**

During the past year, Melbourne Water completed \$8 million of projects as part of its commitment to further improve the quality of water supplied to retail water company customers, primarily in outer-urban and semi-rural areas. These works included six new disinfection plants – three for City West Water customers, two for South East Water customers and one for Yarra Valley Water customers. A further 11 plants were upgraded.

Diesel back-up generators were also installed at disinfection plants to ensure reliable operation through electricity failures. Work also began on covering or replacing open reservoirs to improve drinking water quality for South East Water customers. This work is part of Melbourne Water's water supply strategy which aims to maximise water quality through a closed distribution system downstream of protected catchments.

Several major projects improved the quality of drinking water supplied to retail customers.

Covering open reservoirs, such as this one at Tyabb on the Mornington Peninsula, is part of Melbourne Water's commitment to improve water quality supplied to retail water company customers.

A new water filtration plant was opened at Yarra Glen to upgrade the quality of drinking water for Yarra Valley Water customers. This follows the installation of two similar plants at Healesville.

#### **Working with councils on responsible urban development**

Melbourne Water worked closely with local councils to ensure that information – the result of a \$2.5 million drainage survey – was incorporated as special building overlays (SBO) in local government planning schemes across Melbourne. The survey maps the path of overland water flows that would occur in a storm exceeding the design capacity of the underground drainage system.

At 30 June 1999, four councils – Port Phillip, Moonee Valley, Wyndham and Brimbank – had formally adopted SBO amendments based on the survey. The City of Hume had completed public exhibition of an SBO amendment but had not yet voted to adopt it. Four more – Hobsons Bay, Maribyrnong, Nillumbik and Maroondah – had SBO amendments on exhibition.

Property information statements issued by City West Water, South East Water and Yarra Valley Water now incorporate the data. As a result, developers and property owners are much better informed on flood risks when they make investment and development decisions.

The Corporation worked with the development industry and local councils to revise its land development manual. The manual focuses on a partnering approach with industry and specifies objectives and required outcomes on

stormwater quality and flood protection at new sub-divisions. It includes updated guidelines, design drawings and a section on environmental requirements.

#### **Cooperation key to drought management**

Water stored in greater Melbourne's major reservoirs fell as low as 57 per cent of capacity during the summer of 1998/99 for the second consecutive year. Melbourne Water provided a weekly update on its water storages and worked with the retail customers to review the water industry drought response plan.

The continuing dry weather had an impact on river flows and this affected business and industry that have permits to divert water from the rivers. Melbourne Water issues permits for people who divert water from the Yarra and Maribyrnong Rivers. There are 44 permits on the Maribyrnong, mostly held by market gardeners, who faced restrictions of 70 per cent in 1998/99 to maintain environmental flows and protect the river environment. Melbourne Water worked closely with its diversion customers to assist them through this difficult period.

Restrictions were necessary but much less severe on the Yarra and its tributaries where a total of 1330 companies and individual landowners are licensed diverters. They use the water for farms, vineyards and other businesses.

The Yarra catchment diverters and Melbourne Water cooperated closely on managing the restrictions as part of a drought response plan, which was finalised about a month before it was due to be implemented.

Water sensitive developments, such as this one at Berwick Springs, help protect against flooding and improve the quality of stormwater run-off. The development won an excellence award from the Urban Development Institute of Australia.

Domaine Chandon's Bernie Wood in front of the Yarra Valley winery's dam.  
The winery diverts water from the Yarra River only during winter.

# BE A LEADER IN ENVIRONMENTAL MANAGEMENT

*Melbourne Water treats most of the city's sewage and industrial waste.*

*The priority of the Corporation is to ensure that resources are allocated to minimise the environmental impact of these activities.*

The Western Treatment Plant at Werribee processes more than half the city's raw sewage and industrial waste: about 500 megalitres a day. The Eastern Treatment Plant at Carrum processes about 350 megalitres a day.

The Western Treatment Plant is recognised internationally for its innovative design and for being planned with an eye to the future. That reputation was maintained with a major upgrade, the most significant in the plant's 100-year history, announced by the Minister for Agriculture and Resources in April 1999.

Under the \$120 million upgrade, the plant's lagoon system, which relies partly on natural treatment processes, is being complemented by the latest activated sludge technology used successfully at the Eastern Treatment Plant.

The activated sludge system and other facilities due to be introduced to each lagoon will increase nitrogen removal at the Western Treatment Plant from 55 per cent to 70 per cent, to improve the long-term health of Port Phillip Bay.

Part of the first pond of each of the plant's three modern lagoon systems has been fitted with state-of-the-art membrane covers to eliminate odour and trap about 20,000 cubic metres of methane gas a day. Capturing the methane gas more than halves greenhouse gas emissions from the plant.

One of the modern lagoons has a power generation facility, and the 1.3 megawatts of electricity produced there is more than enough to power that lagoon's aerators. Power generation facilities are planned for the other modern lagoons. The lagoons will continue to allow time for naturally occurring bacteria and sunlight to provide natural disinfection.

The upgrade at Western Treatment Plant will improve effluent quality, and this, together with the construction of a reuse channel and a 10 megalitre pond, will help the development of effluent recycling schemes near the Werribee plant.

After two years of detailed analysis, the CSIRO released its report on the Effluent Management Study in April 1999. The study, which assessed the impact of effluent disposal in Bass Strait, provides the scientific basis for future options being developed by Melbourne Water and the Environment Protection Authority.

## **What the CSIRO study found**

The \$1.3 million CSIRO Effluent Management Study into effluent disposal from the Eastern Treatment Plant found that the current outfall has some environmental impact on the local ecosystem around the discharge point, but poses negligible threat to human health. It also found that some sewage treatment improvements, particularly increased removal of ammonia, could reduce the impact on and near the shore.

The Carrum plant, which treats 42 per cent of Melbourne's sewage, discharges treated effluent into Bass Strait at Boags Rocks, near Cape Schanck, south of Melbourne, via a 56 kilometre pipeline. The discharge point is near the Gunnamatta surf beach.

**Anthony Wallace of Connell Wagner inspecting pipes to be used in the construction of the effluent recycling channel at the Western Treatment Plant.**

The study, commissioned by Melbourne Water, recommended that treatment improvements and increased recycling of the treated effluent would provide an appropriate balanced response between cost, sustainability and environmental improvement. It found that there were substantial difficulties in achieving total recycling, particularly in the short to medium term.

The Western Treatment Plant's modern lagoons  
meet Port Phillip Bay.

However, it suggested that a concerted program of effluent recycling could reduce effluent discharge significantly over time. It also said that indirect potable recycling – where effluent is treated to drinking water quality and returned to one of the major reservoirs – should be considered in future rather than building new dams.

The Effluent Management Study examined 14 methods for reducing the volume of water discharged, ranging from less than one per cent for industrial or ‘grey water’ recycling to almost 95 per cent for potable recycling. Costs per kilolitre of reducing the flow ranged from 10 cents to almost \$10.

The study found that extending the pipeline into deeper water would allow the Boags Rocks ecosystem to recover, but may not reduce ecological effects further afield or the risk of algal blooms in the area.

The CSIRO analysed samples of abalone, parrot fish, and sea squirts (cunjevoi) just offshore from the discharge point for a range of contaminants and found that the Boags Rocks outfall poses no threat to seafood or people consuming seafood harvested in the vicinity.

The results were consistent with the results of a routine monitoring program carried out by Melbourne Water and the findings of a Monash University study on the health effects of ocean outfalls, conducted for the Effluent Management Study. The Monash researchers found that surfers in the outfall area appear to be at no additional risk of contracting disease compared with other beaches studied.

Melbourne Water is working closely with the Environment Protection Authority to develop an appropriate strategic response for the future management of effluent disposal from the Eastern Treatment Plant.

A component of the research project was an examination of the potential for using recycled effluent from the Eastern Treatment Plant. The report set the direction for initiatives including the establishment of a significant effluent recycling scheme near the Eastern Treatment Plant at Carrum.

Businesses already recycling Eastern Treatment Plant effluent include vineyards, flower growers, market gardeners, nurseries, council recreation reserves, golf courses, an orchard, a hydroponic tomato grower and a school. These businesses, most of which take effluent directly from the plant’s effluent outfall, are able to gain

high quality recycled water for significantly less than the 72 cents a kilolitre for tap water.

#### **A more efficient Eastern Treatment Plant**

Melbourne Water has put in place a total of \$27 million of initiatives to further modernise the Eastern Treatment Plant and improve its environmental and business performance.

A new pumping system being installed in the plant’s primary treatment area will remove collected grit more efficiently from sedimentation tanks. The grit and screening system will be upgraded to prevent grit and floating material, such as plastic and cotton buds and other similar waste, entering the secondary (or biological) treatment area. The project will result in further operating efficiencies.

Consistent with Environment Protection Authority requirements, air quality improved with the covering of various sludge channels and installation of a new air

extraction system at the plant. This system will reduce overall odour emissions from the plant and allow greater flexibility in the operation of the plant’s sludge management areas.

A new process control system, which is being installed, and other planned automation works, provide operating efficiencies by enabling the plant to be monitored and operated from a single control room.

Melbourne Water also plans to upgrade various plant facilities over the next three years to more efficiently use the sludge gas (methane) produced and to make the plant more energy efficient overall and further reduce greenhouse gas emissions.

Recycled water is used by Peninsula Country Golf Club and several other golf courses on the Mornington Peninsula.

The CSIRO studied the environmental impact of effluent discharge to Bass Strait from the outfall at Boags Rocks, near Cape Schanck.

### **Nature's filters create healthy waterways**

Melbourne Water's revegetation program aims to improve the long-term health of waterways. In 1998/99, a total of 442,000 trees, shrubs, grasses and other plants were planted to create wetlands to treat stormwater run-off, guard against erosion, restore corridors for wildlife, and create a sense of involvement among landowners and community groups.

Work on several wetlands projects continued during the year, including the project at the Woodlands Industrial Estate, in Braeside. A consultative group including representatives of seven local conservation groups helped Melbourne Water shape this project, which consists of three wetlands.

The wetlands will help treat stormwater that flows into Mordialloc Creek and Port Phillip Bay, but are also seen as a valuable community resource, with areas for passive recreation and an environment for local wildlife.

In a further effort to reduce the impact of stormwater pollutants on Port Phillip Bay a \$7.5 million wetlands project was announced at a forum, attended by 110 stakeholders from the water and development industries, including Members of Parliament, government departments, environmental organisations, local government and research institutions.

The project, known as the Catchment of the Future, involves the construction and monitoring of 10 separate wetlands over the next three years and is jointly funded by Melbourne Water and the Federal Government's Natural

Heritage Trust. Construction of the first of the ten wetlands began in June 1999 at Hampton Park.

During the year, Melbourne Water won an excellence award from the Urban Development Institute of Australia for the Corporation's role in the development of the Berwick Springs housing estate, in which a floodplain was transformed into an environmental wetland, with more than 5000 trees planted and a lake constructed.

### **Protecting our aquatic wildlife**

Melbourne's waterways are home to dozens of fish species and other wildlife, including platypus. The presence of a diverse aquatic ecosystem is a sign of clean and healthy waterways.

Melbourne Water has built fish ladders or fishways to protect endangered species of native fish by opening up waterways. Over the years, obstructions such as weirs have stopped some species of migratory fish reaching their natural feeding and breeding grounds.

In 1998/99, Melbourne Water constructed six fishways, at Darebin Creek, Bunyip River and the Maribyrnong River. Monitoring is showing that large numbers of migratory native fish, including tupong and galaxiids, are taking advantage of the fishways and moving upstream. At least seven native migratory fish species will use the fishways to access important feeding and breeding habitats. The fishways, in addition to improvements in feeding areas for fish and platypus, were built as part of a series of 23 projects costing \$3.3 million.

A major activity in 1998/99 was the revegetation along the banks of many of Melbourne's waterways. Melbourne Water spends \$12 million a year on improving the water quality in greater Melbourne's waterways.

Melbourne's wetlands and waterways are home to a diverse range of fish species and wildlife. Black swans for example, breed at the Edithvale-Seaford wetlands.

# FULFIL OUR COMMUNITY OBLIGATIONS

*Melbourne Water works hard to maintain and safeguard the natural advantage of its water supply system: the protected catchments. Bushfires, erosion and run-off, as well as unauthorised public entry into the catchments, are some of the risks that have to be managed.*

## Safeguarding the protected catchments

Melbourne Water depends on its protected catchments, which cover more than 130,000 hectares of pristine forest, to deliver high quality water to its retail customers. Safeguarding these catchments is an essential element of the Corporation's management of the water supply system.

The main threat to the catchments that the Corporation has to manage is fire. Not only do bushfires leave behind soot and ash in the catchments, making it more difficult to disinfect the water, they can also destroy mature mountain ash trees that cover about half the catchment areas.

Afterwards, young seedlings take their place, soaking up far more water than the mature trees. As a result, less water flows into streams and, eventually, reservoirs.

Firefighters are on call over the summer period at all times to try to ensure that any fires that occur do not take hold.

Only three fires were recorded in what was a mild and humid summer of 1998/99. All were near the Upper Yarra catchment, and were caused by lightning, arson and by high winds bringing down power lines. The latter, at McMahons Creek, was the most severe and burned two hectares of bushland.

The water supply catchments are closed to the public to minimise the risk of human-borne disease entering the water supply system and to guard against interference and vandalism to assets.

During the year, Melbourne Water stepped up surveillance of the catchments. Since January 1998, 12 people have been prosecuted for breaching bylaws and regulations, and a further six cases are pending.

The system of closed catchments provides the best protection against contamination of the water supply by cryptosporidium, giardia and other parasites. Any risk is further reduced by disinfection and by the long period – up to five years – for which water is stored in reservoirs before use.

Testing of Melbourne's source waters for cryptosporidium and giardia began in 1993 and continued through 1998/99 in a program reported to the Department of Human Services. Only extremely low levels of parasites have ever been detected.

Melbourne Water pays particular attention to the roads in the catchments to ensure appropriate drainage is constructed and maintained to minimise erosion and sediment flowing into the water.

The Corporation is continuing to develop its understanding of the impact of erosion and run-off, as well as bushfires and changes to vegetation, on its water supply catchments through several research programs run in conjunction with the Cooperative Research Centre for Catchment Hydrology.

An important feature of Melbourne's Water supply catchments is the massive stands of Alpine and Mountain Ash. These trees must be protected from the threat of bushfires.

Maroondah, one of Melbourne's water supply catchments.  
These catchments cover 130,000 hectares of natural wilderness.  
They are closed to the public to protect drinking water quality.

## COMMUNITY CONSULTATION INTEGRATED INTO THE BUSINESS

*Community consultation is an integral part of Melbourne Water's business, particularly in the planning of capital works projects.*

*All technical project managers receive training to ensure community consultation needs are assessed right at the start of the planning process.*

During 1998/99, community relations guidelines for contractors were finalised, further integrating community consultation into the business.

Melbourne Water designs and implements projects to minimise their impact on the community and ensure that residents, community groups and other organisations have their say.

During the year, an external reference group helped produce an operating charter which outlines Melbourne Water's goals and responsibilities for waterways and drainage. People from environmental groups, local government, research organisations and the development industry were invited to join the group to ensure the charter was relevant to external audiences and met the expectations of a range of stakeholders.

In six of the year's main projects – for Epsom Road and the North Western Sewer, Ballar Creek, Elsternwick Park and St Kilda Road drainage and flood mitigation works, and Yan Yean Reservoir – Melbourne Water letterboxed almost 30,000 households and mailed more than 3100 other households. In addition, doorknocking and newspaper advertisements were used to advise residents of potential disruption, and in several cases, community consultation committees were established.

On the Mornington Peninsula, Melbourne Water worked with the local council and the community on works to prevent erosion and land slippage along Ballar Creek.

The \$2.4 million project was funded by the Shire of Mornington Peninsula and Melbourne Water.

Community consultation was also important in a \$4 million flood protection project in Elwood, helping the community cope with year-long works.

Consultation can also help shape the scope of major projects. An example of this occurred during the Effluent Management Study which involved consultation with the

Australian Conservation Foundation, Surfriders Foundation, Environment Victoria, Friends of the Earth, the River Basin Management Society, the local community and government agencies.

Surfriding organisations suggested that the study should include research into the health of surfers who use Gunnamatta Beach, near the Boags Rocks outfall. A research project was undertaken by Monash University's Department of Epidemiology and Preventive Medicine, which assessed the health impacts of beaches near outfalls around the world and found that Gunnamatta Beach is clean and safe for swimming.

Community liaison committees were formed at the Eastern and Western Treatment Plants to provide

advice on the impact of plant operations and assist in the development of environmental improvement plans.

One of the many tours conducted of Melbourne Water's assets and projects during the year. This group inspects the site of a wetlands project in the Hallam Valley.

Skye Tweedly and Ashley Munro, from Manorvale Primary School, Werribee, examine sediment from the Werribee River as part of the community-based program, Waterwatch.

### Testing the water

Melbourne Waterwatch is a community based program that helps school and community groups monitor and learn about the health of their local waterways.

Using water quality monitoring kits, groups test and record information about waterways, including pH, temperature, turbidity, flow rate, nutrients, and pollution. Groups also observe the waterway's visual environment.

More than 100 groups are involved in regular monitoring. The information they collect is placed on a Waterwatch database and is analysed and reported annually at local, state and federal levels.

During National Water Week in October 1998, more than 60 groups were involved in the annual 'Snapshot' event. This simultaneous sampling exercise provides a snapshot of waterway water quality throughout the Port Phillip catchment.

Melbourne Waterwatch is part of the national Waterwatch Australia network. The program is supported through the Federal Government's Natural Heritage Trust and by 26 local sponsors, including 22 councils.

Data collected under the program complements that collected from about 60 sites on the main rivers and creeks by Melbourne Water.

### Community awareness

Public accountability to the community complements the Corporation's extensive community consultation programs.

A wide range of material, including water quality data, public health and environment reports, other research reports and studies, strategy documents and a wide range of educational resources are available on the Corporation's Internet site, [www.melbwater.com.au](http://www.melbwater.com.au).

During the year, Melbourne Water sponsored a two-part documentary special on the Yarra River, which was screened on Channel Nine. The documentary, hosted by Jennifer Keyte, traced the river's history and how it shaped the development of Melbourne. More than 300,000 people watched the first part, which went to air in prime time during May 1999. Other media highlights included a program on Melbourne Water's protected catchments on the ABC's *Quantum* and extensive coverage of the arrival of hundreds of Siberian wader birds at the Western Treatment Plant's Lake Borrie.

Research carried out during the year found that the vast majority of people in and around Melbourne believe they have very good drinking water, and three of every four people surveyed showed awareness that water is a finite resource in Melbourne. Separate qualitative research found that Melburnians are proud of the quality of their water and mention it spontaneously as one of the advantages of living in Melbourne.

Another research project found that most people were reasonably satisfied with the waterways they visit, with the best features considered to be clean, well maintained waterways, and the worst feature was litter.

Open days held at Eastern and Western Treatment Plants attracted a total of 600 visitors. More than 4200 school students went on tours of the plants during the rest of the year, and 1330 secondary and tertiary students toured the Sugarloaf Reservoir and Winneke Water Treatment Plant. The tours help inform and educate people about water and sewage treatment.

There were two major public information campaigns in 1998/99 – one on water conservation and the other on the harm to native animals caused by litter washed into waterways.

Lake Borrie wetlands at the Western Treatment Plant. A consultative committee provided advice to Melbourne Water on wildlife at the wetlands.

### Consultative arrangements

In 1998/99, Melbourne Water consulted with and received advice from the following groups regarding the Corporation's activities:

- > Association of Consulting Surveyors
- > Association of Land Development Engineers
- > Australian Industry Group
- > Australian Institute of Building Surveyors
- > Building Designers Association of Victoria
- > Carrum Lowlands Wetlands Management Group
- > City West Water
- > Cooperative Research Centre for Catchment Hydrology
- > Cooperative Research Centre for Freshwater Ecology
- > Cooperative Research Centre Real-Time Flood Forecast Project Review Committee
- > Dandenong Catchment Implementation Committee
- > Department of Infrastructure
- > Eastern Freeway Extension Springvale Road to Ringwood Community Liaison Group
- > Eastern Treatment Plant Local Consultative Committee
- > Effluent Management Study Agencies Group
- > Effluent Management Study Reference Group
- > Effluent Management Study Surfriders Group
- > Emerald Water Quality Improvement Committee
- > Hoddles Creek Streamflow Management Plan Advisory Group
- > Housing Industry Association
- > Insurance Council of Australia
- > Kananook Creek Association
- > Keilor Diverters Advisory Group
- > Koo-Wee-Rup – Longwarry Drainage and Flood Mitigation Advisory Committee
- > Lilydale Lake Consultative Committee
- > Lower Plenty River Coordinating Committee
- > Maribyrnong Catchment Implementation Committee
- > Maribyrnong River Diverters Consultative Committee
- > Master Builders Association
- > Merri Creek Management Committee

- > Moonee Ponds Creek – Cleanup Project
- > Municipal Association of Victoria
- > Operating Charter Reference Committee
- > Patterson Lakes Advisory Committee
- > Port Phillip and Western Port Catchment and Land Protection Board
- > Real Estate Institute of Victoria
- > Royal Australian Institute of Architects
- > Royal Australian Planning Institute
- > Ruffey Lake Park Advisory Committee
- > South East Water
- > South Eastern Outfall Community Consultative Committee
- > St Georges Road Liaison Group
- > State Emergency Prevention Committee
- > State Flood Policy Committee
- > Stormwater Committee
- > Stormwater Management Working Group
- > Trade Waste Acceptance Advisory Committee
- > Truganina LandCare Group
- > Urban Development Institute of Australia
- > Urban Development Industry Association
- > Urban Development Industry Association/Association of Land Development Engineers Industry Liaison Committee
- > Victorian Flood Warning Consultative Committee
- > Victorian Outdoor Range Zoo Committee
- > Water Industry Dams Working Group
- > Water Services Association of Australia
- > Werribee Catchment Implementation Committee
- > Western Port Catchment Implementation Committee
- > Western Treatment Plant Community Liaison Committee
- > Western Treatment Plant Wildlife Consultative Committee
- > Yallock Drainage and River Improvement Rates Advisory Committee
- > Yarra Catchment Implementation Committee
- > Yarra River Diverters Consultative Committee
- > Yarra Valley Water

A reference group involving local government representatives was established to develop an operating charter for waterways and drainage

# CORPORATE GOVERNANCE

*The Board is committed to high standards of corporate governance in carrying out its responsibilities for strategy and policy.*

**T**he Board of Directors is responsible for governance of the Corporation and determines its strategies and policies. The Board operates under the provisions of the *Melbourne Water Corporation Act 1992*. As well as overseeing strategic planning and risk management, the Board reviews remuneration and succession planning.

A number of committees help ensure the Board carries out its functions effectively. The Board has a Charter pursuant to which it operates and this defines the role of the Board and the responsibilities of management.

The Board of Directors comprises a non-executive Chairman, three non-executive directors, and the Managing Director.

The roles of Chairman and Managing Director are separated by legislation. Directors, other than the Managing Director, are appointed by the Minister for Agriculture and Resources for a period not exceeding three years. Board members are eligible for re-appointment, but may not hold office for consecutive periods exceeding nine years. In appointing directors, the Minister is required to ensure as far as possible that directors have qualifications and experience relevant to the operations of the Corporation. The conditions of appointment are established by the Minister.

The performance of Board members is reviewed by the Chairman on an ongoing basis. The Board monitors the performance of management and the succession planning process.

Pursuant to the *Melbourne Water Corporation Act 1992*, the Managing Director is appointed by the Board, following consultation with the Minister, for a period not exceeding five years and is eligible for re-appointment.

The performance of the Managing Director is reviewed by the Board on a regular basis.

Directors have the right to seek independent professional advice in connection with their duties and responsibilities. The *Melbourne Water Corporation Act 1992* provides for declarations of pecuniary interest by directors.

Board meetings are held monthly, excluding January. Regular written reports from management and presentations on corporate and business activities are provided to directors. Board members also participate in site visits and receive corporate publications.



**Board of Directors**  
L-R: Anthony A Browne, Baard Solnordal, Roy V Gilbert, Christopher Stewart, Brian Bayley

Statutory reports are provided to the Government as shareholder. These reports cover key financial information and the performance of the Corporation against key performance indicators established in the Corporate Business Plan.

#### **Board of Directors**

**Christopher Stewart**  
Chairman

Christopher Stewart joined Melbourne Water Corporation as Chairman on 1 January 1995.

Mr Stewart is Chairman of the Bank of Melbourne and a Director of Gandel

Management Limited, Milton Corporation Limited, Permanent Trustee Company Limited and Westpac Banking Corporation. Mr Stewart is Chairman of the Families in Distress Foundation and a Board Member and Trustee of the Financial Markets Foundation for Children.

**Anthony A Browne** BA LLB (Hons)  
Director

Tony Browne is a Senior Partner with Arthur Robinson and Hedderwicks solicitors, and joined the Board on 22 March 1995. He has extensive experience in corporate and financial law and is a member of the Research and Ethics Committee of Epworth Hospital.

**Roy V Gilbert** BA (Hons) PhD  
Director

Roy Gilbert is a consultant and adviser on strategic planning. He has worked on strategic planning and infrastructure projects for the World Bank, the Inter-American Development Bank and the United Nations Industrial Development Organisation. He was previously Permanent Head of the Victorian Ministry of Housing and Chairman of the Victorian Housing Commission and has held other federal and state government positions. Dr Gilbert was appointed to the Board of Melbourne Water on 22 March 1995.

**Baard Solnordal** BEc & Bus. Admin. FCA  
Director

Baard Solnordal was appointed to the Board on 22 March 1995. He is a former Senior Partner with Ernst and Young, chartered accountants, and is a commercial accountant with wide experience as a company director, financial adviser and auditor.

**Brian Bayley**  
Managing Director

Brian Bayley was appointed Managing Director of Melbourne Water on 28 July 1998. He was formerly head of the Corporation's Water Group. Mr Bayley has extensive water industry experience in a broad range of senior management positions.

#### **Board Committees**

##### **Audit Committee**

The Audit Committee's primary objective is to assist the Board in fulfilling its responsibilities on financial reporting, accounting and operational control practices, and compliance with relevant laws. The Committee's Terms of Reference include facilitating communication between the Board, internal and external auditors, and management.

The Audit Committee comprises B Solnordal (Chairman) and A Browne. The Terms of Reference set out requirements for the Committee's composition.

The Managing Director, the Manager Finance and Corporate Services and representatives from PricewaterhouseCoopers, Melbourne Water's internal auditor, attend Audit Committee meetings by invitation. Representatives from the Auditor-General's Office also regularly attend meetings. The Committee's Terms of Reference provide members with unlimited access to auditors and senior management. Members can seek independent advice if necessary. The Audit Committee meets four times a year and may meet more frequently if required. Reports are provided to the Board after each Committee meeting.

##### **Remuneration Committee**

The Remuneration Committee makes recommendations to the Board on remuneration arrangements and terms of employment for executives and other employees.

Remuneration and other terms of employment are reviewed annually. Reviews cover employee performance as well as market and policy factors, as appropriate.

The Committee comprised C Stewart and J King until December and since then has comprised C Stewart, A Browne and R Gilbert. It meets at least twice each year. The Managing Director attends by invitation. Reports are provided to the Board after each Committee meeting. Further details about directors' and executive remuneration are set out in Notes 22 and 23 of the Financial Statements.

##### **Policies and internal control**

The Board has overall responsibility for the Corporation's internal control framework. A Code of Conduct sets out the standards of behaviour expected of all employees. The Code is reviewed and reissued to all employees regularly. All new employees receive the Code on joining Melbourne Water. Corporate policies are reviewed regularly and are available on the Intranet (the Corporation's information network). Major new policies and amendments to existing policies are approved by the Board and are then communicated to employees.

##### **Risk management**

The Board has overall responsibility for the Corporation's risk management. Melbourne Water's risk management policy establishes procedures used to manage risk in a consistent and cost effective manner. Risk management is incorporated into existing management systems by applying elements of a generic management system in designated risk focus areas. The risk management policy and framework are in accordance with Melbourne Water's goal to continually improve the business and conform to the Risk Management Standard AS/NZS 4360:1999.

Melbourne Water has developed an automated system called Risk Audit Procedure, which is aimed at controlling, monitoring and reporting major risks for each risk focus area. A set of management questions addressing major risks are asked on a regular basis and the outcomes and action plans are provided to the Audit Committee every six months.

##### **Year 2000**

Melbourne Water spent more than \$4 million preparing for the year 2000 date change.

The Year 2000 project assessed, tested and, where necessary, rectified critical systems and equipment in all areas of the business.

The project included a detailed analysis of the Corporation's supply chain, and all critical and important suppliers were assessed for year 2000 readiness. The project team included technical specialists from within the organisation and external consultants. Contingency plans were identified during the year and are in place.

Melbourne Water provides monthly reports to the Victorian Government's Department of Treasury and Finance Year 2000 Risk Management Unit and the accuracy of a report on the Corporation's year 2000 preparedness has been confirmed by PriceWaterhouseCoopers.

**Asset risk**

Regular reports on the operation and condition of the water, sewer and drainage asset networks are presented to the Board. Physical assets are classified into risk categories and inspected regularly.

**Operational risk**

Regular operating reports are provided to the Board by each of the groups within Melbourne Water. The reports include performance against budget and financial and non-financial performance indicators. Information is also provided on significant events and incidents and their impact on the Corporation.

The groups also report on any health and environmental compliance matters.

**Financial risk**

The Corporation's business exposes it to financial risk. This includes interest rate risk, credit risk, liquidity risk and operational risk associated with treasury activities.

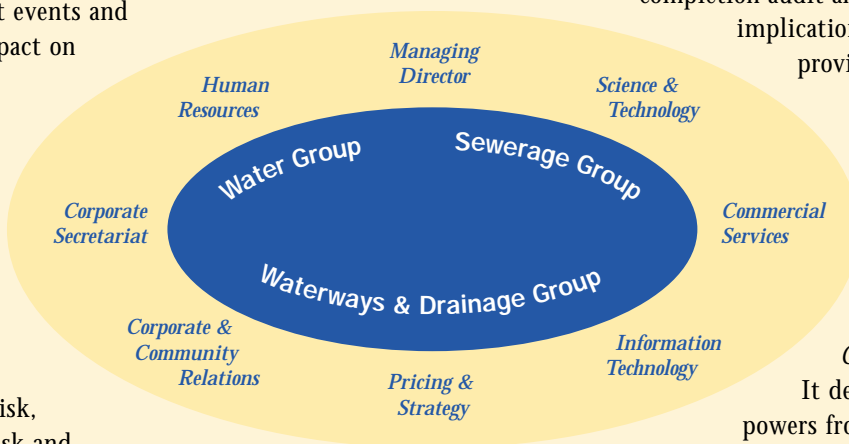
The Corporation has a comprehensive framework for managing financial risk. It includes a Financial Risk Management Policy approved by the Board annually. A Financial Risk Management Committee has been established. The Committee is chaired by the Managing Director and includes senior executives and an external adviser. The Corporation's treasury takes an active approach to managing financial risk through procedures outlined in the policy.

**Occupational Health and Safety**

Melbourne Water's Executive Occupational Health and Safety (OH&S) Committee comprises the Managing Director as Chairman, senior management and employee representatives. The Committee meets monthly and is responsible for the development, implementation and auditing of an effective OH&S management system. The Board is provided with monthly reports on OH&S performance and initiatives.

**Research**

An approval and management process has been established to ensure research is cost effective and targeted at managing business risks and improving productivity. The process encompasses the identification of business needs, financial aspects, project analysis, risk assessment, project review, post completion audit and intellectual property implications. An annual report is provided to the Board.



**Particulars, functions and powers**

Melbourne Water is a statutory corporation constituted under the *Melbourne Water Corporation Act 1992*.

It derives its operational powers from *The Melbourne and Metropolitan Board of Works Act 1958*

(MMBW Act), and other legislation. Melbourne Water's principal decision-making powers affecting members of the public are derived from these two Acts. They should be referred to when detailed information is sought.

Melbourne Water is empowered to make by-laws under the MMBW Act in relation to its functions. Two current by-laws exist relating to Water Supply Protection (1997 No 1) and Waterways and Drainage Protection (1998 No 2) respectively.



**Executive Committee**

L-R: Grant Wilson General Manager Water, Joe Arnephy Manager Finance and Corporate Services, Christine Gibbs Manager Corporate and Community Relations, Brian Bayley Managing Director, Malcolm Haynes Manager Human Resources, David Lynch General Manager Sewerage, Ross Young General Manager Waterways and Drainage, Peter Scott Manager Science and Technology, Howard Rose Manager Pricing and Strategy

Under an agreement with the relevant Minister, effective as of 30 November 1995, the Minister delegated his functions and powers as a Floodplain Management Authority under the *Water Act 1989* to Melbourne Water. Melbourne Water, as an agent of the Minister, provides floodplain management services over the Melbourne Water drainage area.

The Minister has also delegated to Melbourne Water powers of management under the *Water Act* relating to licensed private water diversions from waterways.

#### **Freedom of information**

The designated persons for the purpose of the Act are:

Principal Officer  
Brian Bayley  
Managing Director  
Melbourne Water Corporation

Authorised Officer  
Jane Denton  
Freedom of Information Officer  
Melbourne Water Corporation

During 1998/99, Melbourne Water received 14 requests for access to documents under the *Freedom of Information Act 1982*.

The requests were processed as follows.

Access in full	5
Access in part	1
Access refused	2
Documents not located	2
Transferred to another agency	–
Applicant did not proceed	2
Not finalised	2

Of the 14 applications, nine related to personal property developments and three to WorkCover or personal employment matters. One application concerning dioxins was received on behalf of Greenpeace. A briefing was given and a report released. The final application, from a Member of Parliament, related to changed procedures within Melbourne Water concerning the setting of fees for licensing of Melbourne Water land. Details of the reasons for the changes to the procedures were released.

These details are published in accordance with Part 11 of the *Freedom of Information Act 1982*. Information on Melbourne Water's consultative arrangements required under Section 7 of the Act is set out on page 33. Information on the Corporation's publications, also required under Section 7, is set out on the inside back cover.

#### **Categories of documents**

Melbourne Water uses a computerised file management system for management of correspondence and documents. The Corporation also uses other on-line computer systems to manage financial, human resource and other operational activities and plans relating to its water supply, waterways and drainage and sewerage functions. Historical archives on Melbourne Water's activities are available at the Laverton Research Rooms of the Public Records Office.

#### **Access to documents**

People wanting access to Melbourne Water documents under the *Freedom of Information Act 1982* should write to:

Freedom of Information Officer  
Melbourne Water Corporation  
PO Box 4342  
Melbourne Vic 3001

Each application must clearly identify the documents sought and be accompanied by a \$20 application fee. General enquiries on Freedom of Information can be made by telephoning the Freedom of Information Officer on telephone 9235 7100 between 8am and 5pm, Monday to Friday.

#### **Use of consultants**

The total cost of engaging consultants in 1998/99 was \$4.6 million for both operating and capital activities. Four of the consultancies undertaken were more than \$100,000, including Year 2000 project work of \$2.5 million.

## FIVE YEAR FINANCIAL SUMMARY

### Profit and Loss Statement for year ended 30 June

	1999 \$M	1998 \$M	1997 \$M	1996 \$M	1995 \$M
Operating revenue	449.6	567.0	679.8	686.6	959.8
Operating profit before abnormal items and income tax	166.9	242.5	267.8	208.5	225.7
Abnormal items before income tax	0.0	0.0	4.4	62.0	37.5
Operating profit before income tax	166.9	242.5	263.4	146.5	188.2
Income tax attributable to operating profit	54.1	81.9	97.0	24.6	57.7
Operating profit after income tax	112.8	160.6	166.4	121.9	130.5
Dividend provided for or paid	106.2	141.1	141.3	80.0	28.8

### Balance Sheet as at 30 June

	1999 \$M	1998 \$M	1997 \$M	1996 \$M	1995 \$M
Current assets	27.6	37.4	46.1	48.2	43.7
Non current assets	2728.1	2684.0	2668.1	2682.4	2654.3
Total assets	2755.6	2721.4	2714.2	2730.6	2698.0
Current liabilities	326.2	308.2	454.6	607.0	588.2
Non current liabilities	1363.1	1355.4	1564.9	1690.1	1718.0
Total liabilities	1689.3	1663.6	2019.5	2297.1	2306.2
Net assets	1066.3	1057.8	694.7	433.5	391.8
Total equity	1066.3	1057.8	694.7	433.5	391.8

The following issues should be considered when reviewing the five year financial summary:

- The disaggregation of the retail functions occurred on 1 January 1995.
- Major reforms were introduced by the State to water and sewerage pricing for Melbourne on 1 January 1998.





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